
IMS Application Development
Facility II
Version 2 Release 2

User Reference



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PREFACE

This manual explains how to use IMSADF II for the end user. Terminal operations are described, and batch operations are explained. Also messages and codes for IMSADF II execution are explained.

The manual consists of four chapters.

- **Chapter 1, "Terminal Operations"** gives the interactive procedures for adding, updating, retrieving, and deleting data. Examples are shown for each type of screen encountered.
- **Chapter 2, "Batch Operations"** gives the procedures for performing the same functions as in Chapter 1 in a batch environment.
- **Chapter 3, "Error Messages"** gives the explanation and the required user response for each of the messages that can be generated during the interactive and batch environment.
- **Chapter 4, "ABEND and Completion Codes"** gives explanations for codes generated from abnormal termination of IMSADF II.

RELATED PUBLICATIONS

IMSADF II PUBLICATIONS

- IMS Application Development Facility II Version 2 Release 2 General Information, GH20-6591.
- IMS Application Development Facility II Version 2 Release 2 User Reference, SH20-6592.
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CHAPTER 1. TERMINAL OPERATIONS

With an IMSADF II application system, you can select specific functions and segment transactions via a sequence of menu screens. This chapter gives examples of the screens displayed and the input you would enter to access some of the various functions available in the system. Not all possible functions are presented here.

SIGNING ON

Under CICS/VS/OS, you begin IMSADF II conversational processing by entering:

tttt [mmmmmmm]

where,

tttt

is a one- to four-character transaction code defined to CICS/VS/OS which will give control to IMSADF II. If mmmmmm is omitted, tttt must also be the CICS Basic Mapping Support (BMS) MAPSET name for the IMSADF II Sign-on screen.

mmmmmmm

is a one- to seven-character CICS BMS MAPSET name for the IMSADF II Sign-on screen. If tttt is the same as the MAPSET name for the IMSADF II Sign-on screen, then mmmmmm is redundant and is not required.

Under IMS/VS, you usually begin IMSADF II conversational processing by entering the IMS/VS /FORMAT command. Enter /FOR xxxx as shown in Figure 1-1, and press ENTER to display the appropriate Sign-on screen, where xxxx is the IMSADF II system id for your system. (xxxx is also the IMS/VS Message Format Services (MFS) modname, a member in the FORMAT library.)



```
/FOR xxxx
```

Figure 1-1. IMS/VS /FORMAT

Figure 1-2 is a sample of the IMSADF II Sign-on screen.

S A M P L E P R O B L E M

ENTER THE FOLLOWING SIGN-ON DATA AND DEPRESS ENTER

999999 -- USERID
Z -- PROJECT
Z -- GROUP
-- LOCKWORD

OPTIONALLY, ENTER TRANSACTION DETAILS FOR DIRECT DISPLAY
OPTION: TRX: KEY:

Figure 1-2. Sign-on Screen

To sign on, do the following:

1. Enter data in the USERID, PROJECT, and GROUP fields.
2. Enter data in the LOCKWORD field only if a lockword exit has been implemented. This step is optional.
3. Optionally, you can enter a transaction ID and key in the TRX and KEY fields. In this case, the next screen to appear is the Data Display screen.

If the information is not entered correctly, the screen is redisplayed with the appropriate error message. If the input is correct, the display sequence continues with the Primary Option Menu screen as shown in Figure 1-3.

P R I M A R Y M E N U

OPTION: TRANSACTION MODE: IDENTIFIER:
KEY:

OPTIONS
A = PROJECT MESSAGE SENDING
B = PROJECT MESSAGE DISPLAY
C = SESSION TERMINATION
D = TRANSACTION SELECTION
F = PROJECT / GROUP SWITCH
H = USER MESSAGE SENDING
I = USER MESSAGE DISPLAY

TRANSACTION MODES
1 - DELETE
2 - INITIATE
3 - REMOVE
4 - ADD
5 - UPDATE
6 - RETRIEVE

FOR OPTION - IDENTIFIER IS
D - TRANSACTION ID
F - PROJECT/GROUP
A,B,C,H,I - (NOT USED)

Figure 1-3. Primary Option Menu Screen

The Primary Option Menu screen displays all the options and transaction modes available to the user.

OPTION is a single-character field. Any valid character can be entered, but only those that appear in the option list are accepted and processed. The option list specifies all types of processing available to the user under the system ID (xxxx) entered.

TRANSACTION MODE is a single-digit field. The only acceptable values are the digits 1 through 6. The list of transaction modes is constant on each Primary Option Menu screen. These modes specify the segment intent desired by the user. For example, if a user requests update mode (5), all transaction IDs which allow the user to update a target segment (or path) are displayed on the Secondary Option Menu screen.

A transaction mode must be entered with option D to specify what data base operation is to be performed in the transaction. The transaction modes 1 to 6 are defined as follows:

1-DELETE	Delete a root segment (Note a)
2-INITIATE	Add a root segment (Note a)
3-REMOVE	Delete a non-root segment (Note b)
4-ADD	Add a non-root segment (Note b)
5-UPDATE	Modify a segment (Note b)
6-RETRIEVE	Retrieve for display only (Note c)

Notes:

- a. Delete and initiate are used to give a higher priority to root segment activity. This priority is controlled externally by the user's Sign-on Profile and not within the program. If desired, modes 3 to 6 can be used for all segments and modes 1 to 2 can be ignored.
- b. Remove, add, or update of a target segment also updates any modified segment(s) in the path.
- c. Retrieve mode protects all displayed segment fields. No modifications or data base updates can occur.

The IDENTIFIER field is a two-character field. Data may or may not be required in this field depending on the option selected. If option D is selected, the user can enter a transaction ID in addition to entering a transaction mode. This causes the bypass of the Secondary Option Menu screen if the mode and transaction ID pass the user's profile test. If option F is selected, the new project/group is entered.

The KEY field on this screen is a fifty-character field. Any key data known can be entered either on this screen or as required on later screens. The entry of a fully concatenated key at this point allows the Primary and Secondary Key Selection display screens to be bypassed.

To send a message to another project/group, do the following:

- ```

PROJECT MESSAGE SENDING
OPTION: PROJECT/GROUP:
 SENDING P/G:

ENTER MESSAGE TEXT:

ENTER 'C' TO RETURN TO PRIMARY MENU OR 'Q' TO ENTER SIGNON

```

3. Enter data in the PROJECT/GROUP and TEXT fields. Figure 1-5 illustrates the Project Message Sending screen with the appropriate entries filled in.

- A - Broadcast message to all projects/groups
- P - Send message to a particular project
- U - Send message to a particular group

| OPTION | PROJECT/GROUP                    |
|--------|----------------------------------|
| A      | - (blanks)                       |
| P      | - x(blank) (x = desired Project) |
| U      | - (blank)y (y = desired Group)   |

```

 P R O J E C T M E S S A G E S E N D I N G
OPTION: PROJECT/GROUP: ZZ
 SENDING P/G: SAMPLE PROBLEM

ENTER MESSAGE TEXT: ***MEETING NOTICE*** A MEETING WILL BE HELD FOR DEPT 101 IN
ROOM 301 AT 3:00 P.M. TODAY

ENTER 'C' TO RETURN TO PRIMARY MENU OR 'Q' TO ENTER SIGNON

```

Figure 1-5. Project Message Sending Screen with Data Entered

4. Press ENTER. The screen is read and checked for a valid project/group entry. The screen entered by the terminal operator is redisplayed with the appropriate message shown in Figure 1-6 or Figure 1-7.

```

 P R O J E C T M E S S A G E S E N D I N G
OPTION: PROJECT/GROUP: ZZ
 SENDING P/G: SAMPLE PROBLEM

ENTER MESSAGE TEXT: ***MEETING NOTICE*** A MEETING WILL BE HELD FOR DEPT 101 IN
ROOM 301 AT 3:00 P.M. TODAY
MESSAGE SENT: ***MEETING NOTICE*** A MEETING WILL BE HELD FOR DEPT 101 IN
ROOM 301 AT 3:00 P.M. TODAY

ENTER 'C' TO RETURN TO PRIMARY MENU OR 'Q' TO ENTER SIGNON

```

Figure 1-6. Project Message Sending Screen with a Valid System Message

```

 P R O J E C T M E S S A G E S E N D I N G
OPTION: PROJECT/GROUP: SA
 SENDING P/G: SAMPLE PROBLEM
 ADFE029 THIS PROJECT/GROUP OR USER IS UNKNOWN TO SYSTEM
ENTER MESSAGE TEXT: ***MEETING NOTICE*** A MEETING WILL BE HELD FOR DEPT 101 IN
ROOM 301 AT 3:00 P.M. TODAY
 MESSAGE SENT:

ENTER 'C' TO RETURN TO PRIMARY MENU OR 'Q' TO ENTER SIGNON

```

Figure 1-7. Project Message Sending Screen with an Invalid System Message

5. If an invalid system message was entered, correct the PROJECT/GROUP field. Press ENTER.
6. Project message sending is complete. To exit, enter C or Q in the OPTION field.
7. Press ENTER. If C was entered, the Primary Option Menu screen is displayed. If Q was entered, the Sign-on screen is displayed. You can continue with another transaction or end your session.

## DISPLAYING PROJECT MESSAGES

To display a project message:

1. Enter B in the OPTION field on the Primary Option Menu.
2. Press ENTER. The Project Message Display screen, shown in Figure 1-8, appears.

All unacknowledged messages generated by the Project Message Sending function are displayed for the project/group associated with the terminal. The display will include as many messages as will fit on the screen. The messages are ordered by date and time of generation.

|                                                     |                |                                                               |                               |
|-----------------------------------------------------|----------------|---------------------------------------------------------------|-------------------------------|
| P R O J E C T   M E S S A G E   D I S P L A Y       |                |                                                               |                               |
| OPTION:                                             | NUMBER(S):     | TO:                                                           | PROJECT/GROUP: SAMPLE PROBLEM |
| ALLOWABLE OPTIONS:                                  |                | 'C' TERMINATE OPTION                                          |                               |
| 'Q' EXIT TO SIGNON                                  |                | 'A' ACKNOWLEDGE MESSAGE NUMBER(S)                             |                               |
| 'D' DISPLAY ALL MESSAGES                            |                | 'F' FORWARD NUMBER OF MESSAGES                                |                               |
| 'U' DISPLAY ALL UNACKNOWLEDGED MESSAGES             |                | (DEFAULT OPTION)                                              |                               |
| *** USER MESSAGES FROM DATA BASE ADMINISTRATION *** |                |                                                               |                               |
| 01                                                  | 07/27/82 12:24 | * THE SYSTEM WILL BE DOWN FROM FRIDAY 1700 TO MONDAY 0800     |                               |
| 02                                                  | 12:24          | * PROBLEMS WITH TERMINALS SHOULD BE REPORTED TO X1000         |                               |
| 03                                                  | 12:24          | * THE NEW SCREENS FOR PARTS INVENTORY SYSTEM WILL BE          |                               |
|                                                     |                | AVAILABLE ON FRIDAY. ANY PROBLEMS SHOULD BE REPORTED TO X2000 |                               |
| *** USER MESSAGES FROM SAMPLE PROBLEM ***           |                |                                                               |                               |
| 04                                                  | 07/27/82 12:25 | * ***MEETING NOTICE*** A MEETING WILL BE HELD FOR DEPT 101    |                               |
|                                                     |                | IN ROOM 301 AT 3:00 P.M. TODAY                                |                               |

Figure 1-8. Project Message Display Screen

3. Enter data in the OPTION and NUMBER(S) fields.

The OPTION field is used to indicate what processing is to be performed for this function.

The NUMBER(S) field is used to designate specific message numbers, a range of message numbers, or a project/group for options A, F, R, and X.

The allowable values for the OPTION field are:

- A - Acknowledge a specific message or range of messages. The number or range of numbers of messages to be acknowledged is specified in the NUMBER(S) field. If one message is to be acknowledged, the number is entered in the first part of the field. If a range of numbers is desired, the range is specified in both parts of the field. If all messages are to be acknowledged, the field is left blank. The message processed is deleted from the screen.
- C - Terminate option. The option cancels the session out of Message Display and returns to the Primary Option Menu.
- D - Display all messages. Displays all acknowledged and unacknowledged messages in the data base for this project/group.

- F - Forward number of messages. This option moves forward in the data base the number of messages specified in the first part of the NUMBER(S) field.
- Q - Terminate the conversation. The Sign-on screen is displayed.
- U - Display only unacknowledged messages. This is the default option.
- R - "Unacknowledge" a specific message or range of messages. The number or range of numbers of message(s) to be unacknowledged is specified in the NUMBER(S) field as described under option A. This option resets acknowledged messages to unacknowledged status.

**Note:** This option is a special case and is not shown on the Project Message Display screen.

- X - Display project messages for a requested project/group. The project/group requested is entered in the first part of the NUMBER(S) field and refers to some project/group other than that of the operator conducting the session. An X option entered with a blank NUMBER(S) field will turn off the X option.

**Note:** This option is available only to the data base administrator (Group=X) and is not shown on the Project Message Display screen.

A blank option causes any additional messages that are not contained on the current screen to be displayed.

4. Press ENTER. The Project Message Display screen is redisplayed with a status message.

For an example of a sample response screen, see Figure 1-9. This figure illustrates that the user entered option A for message number 3. The system marked message 3 as acknowledged and deleted it from the display. In addition, the system indicated completion of processing by displaying the appropriate information message on Line 3 of the screen.

All messages are returned in the area illustrated in Figure 1-9. Generally, such messages will specify errors that have occurred.

```

 P R O J E C T M E S S A G E D I S P L A Y
OPTION: NUMBER(S): TO: PROJECT/GROUP: SAMPLE PROBLEM
 ADFE030 MESSAGE(S) HAVE BEEN ACKNOWLEDGED
ALLOWABLE OPTIONS:
'Q' EXIT TO SIGNON 'A' ACKNOWLEDGE MESSAGE NUMBER(S)
'D' DISPLAY ALL MESSAGES 'F' FORWARD NUMBER OF MESSAGES
'U' DISPLAY ALL UNACKNOWLEDGED MESSAGES (DEFAULT OPTION)

*** USER MESSAGES FROM DATA BASE ADMINISTRATION ***
01 07/27/82 12:24 * THE SYSTEM WILL BE DOWN FROM FRIDAY 1700 TO MONDAY 0800
02 12:24 * PROBLEMS WITH TERMINALS SHOULD BE REPORTED TO X1000
*** USER MESSAGES FROM SAMPLE PROBLEM ***
03 07/27/82 12:25 * ***MEETING NOTICE *** A MEETING WILL BE HELD FOR DEPT 101
 IN ROOM 301 AT 3:00 P.M. TODAY

```

Figure 1-9. Project Message Display Screen with Status Message

5. When all messages have been displayed and acknowledged, enter C or Q in the OPTION field.
6. Press ENTER. If C was entered, the Primary Option Menu screen is displayed. If Q was entered, the Sign-on screen is displayed. You can continue with another transaction or end your session.

#### TERMINATING THE CONVERSATION

To end your conversation:

1. Enter C in the OPTION field on the Primary Option Menu screen or enter Q on any other screen except the error screen.
2. Press ENTER. The Sign-on screen will be redisplayed. You can:
  - sign on under another user ID and/or project/group, or
  - clear the screen.

#### SWITCHING PROJECT/GROUP

To switch to another project/group:

1. Enter F in the OPTION field and a new project/group code in the IDENTIFIER field on the Primary Option Menu screen.
2. Press ENTER.

The system then checks the user ID that was entered previously to see whether or not it is valid for the new project/group code just entered. If it is valid, the current conversation is terminated and a new conversation is initiated. The Primary Option Menu screen is displayed.

If it is not valid, the Primary Option Menu screen is redisplayed with an appropriate error message.

3. If it is not valid, enter a valid project/group code or end your session.

Messages can be entered into the Message Data Base for a specific user.  
To send user messages:

- ```

      U S E R   M E S S A G E   S E N D I N G
OPTION:      SENDING TO:

ENTER MESSAGE:

```

3. Enter the header segment key in the SENDING TO field for the user who is to receive the message. The header segment can be of any type (name or user ID) that has been inserted previously in the Message Data Base for your installation.
4. Enter the message to be sent in the ENTER MESSAGE field. You can enter up to 127 characters.
5. Press ENTER.

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```

                                U S E R   M E S S A G E   S E N D I N G
OPTION:      SENDING TO:  999999

ENTER MESSAGE: THE LUNCHEON FOR J.R. HAS BEEN POSTPONED UNTIL FRIDAY
MESSAGE SENT:  THE LUNCHEON FOR J.R. HAS BEEN POSTPONED UNTIL FRIDAY

```

Figure 1-11. User Message Sending Screen with Successful Message

Figure 1-12 illustrates the entry of a message for a non-existent user. The entered screen is redisplayed with an appropriate error message such as that shown.

```

                                U S E R   M E S S A G E   S E N D I N G
OPTION:      SENDING TO:  JSMITH
                ADFF048 USER DOES NOT EXIST IN THE SYSTEM
ENTER MESSAGE: THE LUNCHEON FOR J.R. HAS BEEN POSTPONED UNTIL FRIDAY
MESSAGE SENT:

```

Figure 1-12. User Message Sending Screen with Unsuccessful Message

6. When you have sent all your messages, enter C or Q in the OPTION field.
7. Press ENTER. If C was entered, the Primary Option Menu screen is displayed. If Q was entered, the Sign-on screen is displayed. You can continue with another transaction or end your session.

DISPLAYING USER MESSAGES

You can view those messages generated by the User Message Sending function. To display these messages:

1. Enter I in the OPTION field on the Primary Option Menu screen.
2. Press the ENTER Key. The User Message Display screen, illustrated in Figure 1-13, is displayed showing all unacknowledged messages for the user whose ID was entered on the Sign-on screen.

U S E R M E S S A G E D I S P L A Y		
USER KEY: 999999		
OPTION:	NUMBER(S):	TO:
ALLOWABLE OPTIONS:		
'A' ACKNOWLEDGE MESSAGE NUMBER(S)		
'B' BACK UP TO FIRST MESSAGE	'C' TERMINATE OPTION	'Q' EXIT TO SIGNON
'D' DISPLAY ALL MESSAGES	'F' FORWARD NUMBER OF MESSAGES	
'U' DISPLAY ONLY UNACKNOWLEDGED MESSAGES (DEFAULT OPTION)		
*** USER MESSAGES TO 999999 ***		
01	07/27/82 12:25	* THE PROCEDURE FOR ORDERING PART 02RC07GF273J HAS BEEN MODIFIED
02	12:25	* THE LUNCHEON FOR J.R. HAS BEEN POSTPONED UNTIL FRIDAY

Figure 1-13. User Message Display Screen

3. Enter the letter corresponding to the processing you want to perform in the OPTION field. Except for Option X, the options available are the same as those shown for Project Message Display.
4. Enter a number in the NUMBER(S) field, if option A, R or F was entered. These message numbers are used in the same manner as described under Project Message Display.

Messages can be displayed to indicate the status of an operation.

5. When you have viewed all the necessary messages, enter C or Q in the OPTION field.
6. Press ENTER. If C was entered, the Primary Option Menu screen is displayed. If Q was entered, the Sign-on screen is displayed. You can continue with another transaction or end your session.

ADDING DATA (EXPERIENCED USER)

Note: On the Sign-on screen the TRX field is made up of the one-character TRANSACTION MODE and the two-character transaction IDENTIFIER.

1. On the Sign-on screen or the Primary Option Menu screen, enter the following:

D in the OPTION field

2 or 4 in the TRANSACTION MODE field

the transaction ID in the IDENTIFIER field

the key of the segment in the KEY field

2. Press ENTER.

A Data Display screen similar to the screen shown in Figure 1-14 is displayed. The Data Display screens can vary depending on the application and the location.

The TRX field is used to change the transaction mode and/or the transaction ID to be processed. The ID can be changed to another standard processing transaction ID or to a special processing transaction ID. Any value entered into the TRX field effectively terminates the current transaction processing. If the mode is changed (position 1 of the TRX field), the screen will be redisplayed with the new mode. When the segment to be viewed is changed (positions 2 and 3, TRX field), the key field also should be changed. Otherwise, the next screen displayed will be key selection to reach the target segment for the new segment to be viewed.

The KEY field is used to display the fully concatenated key for the segments being displayed. This field may be updated in any way that is consistent with segment key requirements. For instance, entering key information for a segment change saves iterations through the key selection process.

S A M P L E P R O B L E M			
ADD		TRANSACTION: INVENTORY	
OPTION:	TRX: 4IV KEY: 02RC07GF273J	0028011128	
*** ENTER DATA FOR ADD ***			
PART NUMBER----	02RC07GF273J	DESCRIPTION----	RESISTOR
AREA-----	2	INV DEPT-----	80
PROJECT-----	111	DIVISION-----	28
UNIT PRICE-----	.00	UNIT-----	
ATTR COAP-----	0	ATTR PLANNED---	0
ATTR COAD-----		STOCK DATE-----	
LAST TRANS-----	0	RQMNTS CURRENT--	0
RQMNTS UNPLAN--	0	ON ORDER-----	0
TOTAL STOCK----	0	DISB PLAN-----	0
DISB UNPLAN----	0	DISB SPARES----	0
DISB DIVERS----	0		

Figure 1-14. Sample Data Display Screen

3. Add the necessary data.
4. Press ENTER. The screen is displayed again.

5. Check any messages on the screen and perform the appropriate action.
6. Enter data in one of the following fields:

- a. OPTION field

For OPTION field values, see "Data Display OPTION Values" on page 1-19.

- b.. TRX or KEY fields

If a new value is entered in the TRX or KEY fields (or key fields in the data display), the new transaction or key is processed.

- c. Data display fields

If any data display fields are modified, normal processing continues.

If none of the above conditions is encountered, the display is shown again with message ADFE191 indicating that no modification has been made to either the data or control fields.

UPDATING DATA (EXPERIENCED USER)

Note: On the Sign-on screen the TRX field is made up of the one-character TRANSACTION MODE and the two-character transaction IDENTIFIER.

1. On the Sign-on screen or the Primary Option Menu screen, enter the following:
 - D in the OPTION field
 - 5 in the TRANSACTION MODE field
 - the transaction ID in the IDENTIFIER field
 - the key of the segment in the KEY field
2. Press ENTER.

A Data Display screen similar to the screen shown in Figure 1-15 is displayed. The Data Display screens can vary depending on the application and the location.

The TRX field is used to change the transaction mode and/or the transaction ID to be processed. The ID can be changed to another standard processing transaction ID or to a special processing transaction ID. Any value entered into the TRX field effectively terminates the current transaction processing. If the mode is changed (position 1 of the TRX field), the screen will be redisplayed with the new mode. When the segment to be viewed is changed (positions 2 and 3, TRX field), the key field also should be changed. Otherwise, the next screen displayed will be key selection to reach the target segment for the new segment to be viewed.

The KEY field is used to display the fully concatenated key for the segments being displayed. This field may be updated in any way that is consistent with segment key requirements. For instance, entering key information for a segment change saves iterations through the key selection process.

S A M P L E P R O B L E M			
UPDATE		TRANSACTION: INVENTORY	
OPTION:	TRX: 5IV KEY: 02RC07GF273J 0028009126		
*** ENTER DATA FOR UPDATE ***			
PART NUMBER----	02RC07GF273J	DESCRIPTION----	RESISTOR
AREA-----	2	INV DEPT-----	80
PROJECT-----	091	DIVISION-----	26
UNIT PRICE----	.00	UNIT-----	0000
ATTR COAP-----	0	ATTR PLANNED---	0
ATTR COAD-----	0	STOCK DATE-----	516
LAST TRANS-----	517	RQMNTS CURRENT-	17
RQMNTS UNPLAN--	0	ON ORDER-----	0
TOTAL STOCK----	17	DISB PLAN-----	57
DISB UNPLAN----	700	DISB SPARES----	0
DISB DIVERS----	0		

Figure 1-15. Sample Data Display Screen

3. Change the necessary data.
4. Press ENTER. The screen is displayed again.
5. Check any messages on the screen and perform the appropriate action.
6. Enter data in one of the following fields:

a. OPTION field

For OPTION field values, see "Data Display OPTION Values" on page 1-19.

b. TRX or KEY fields

If a new value is entered in the TRX or KEY fields (or key fields in the data display), the new transaction or key is processed.

c. Data display fields

If any data display fields are modified, normal processing continues.

If none of the above conditions is encountered, the display is shown again with message ADFE191 indicating that no modification has been made to either the data or control fields.

RETRIEVING DATA (EXPERIENCED USER)

Note: On the Sign-on screen the TRX field is made up of the one-character TRANSACTION MODE and the two-character transaction IDENTIFIER.

1. On the Sign-on screen or the Primary Option Menu screen, enter the following:

D in the OPTION field
6 in the TRANSACTION MODE field
the transaction ID in the IDENTIFIER field
the key of the segment in the KEY field

2. Press ENTER.

A Data Display screen similar to the screen shown in Figure 1-16 is displayed. The Data Display screens can vary depending on the application and the location.

The TRX field is used to change the transaction mode and/or the transaction ID to be processed. The ID can be changed to another standard processing transaction ID or to a special processing transaction ID. Any value entered into the TRX field effectively terminates the current transaction processing. If the mode is changed (position 1 of the TRX field), the screen will be redisplayed with the new mode. When the segment to be viewed is changed (positions 2 and 3, TRX field), the key field also should be changed. Otherwise, the next screen displayed will be key selection to reach the target segment for the new segment to be viewed.

The KEY field is used to display the fully concatenated key for the segments being displayed. This field may be updated in any way that is consistent with segment key requirements. For instance, entering key information for a segment change saves iterations through the key selection process.

S A M P L E P R O B L E M			
RETRIEVE	TRANSACTION: INVENTORY		
OPTION:	TRX: 6IV	KEY: 02RC07GF273J	0028009126
PART NUMBER----	02RC07GF273J	DESCRIPTION----	RESISTOR
AREA-----	2	INV DEPT-----	80
PROJECT-----	091	DIVISION-----	26
UNIT PRICE-----	.00	UNIT-----	0000
ATTR COAP-----	0	ATTR PLANNED---	0
ATTR COAD-----	0	STOCK DATE-----	516
LAST TRANS-----	517	RQMNTS CURRENT-	17
RQMNTS UNPLAN--	0	ON ORDER-----	0
TOTAL STOCK----	17	DISB PLAN-----	57
DISB UNPLAN----	700	DISB SPARES----	0
DISB DIVERS----	0		

Figure 1-16. Sample Data Display Screen

3. Review the data.
4. Press ENTER. The screen is displayed again.

5. Check any messages on the screen and perform the appropriate action.
6. Enter data in one of the following fields:

- a. OPTION field

For OPTION field values, see "Data Display OPTION Values" on page 1-19.

- b. TRX or KEY fields

If a new value is entered in the TRX or KEY fields (or key fields in the data display), the new transaction or key is processed.

- c. Data display fields that are modifiable

If any data display fields are modified, normal processing continues.

If none of the above conditions is encountered, the display is shown.

DELETING DATA (EXPERIENCED USER)

Note: On the Sign-on screen the TRX field is made up of the one-character TRANSACTION MODE and the two-character transaction IDENTIFIER.

1. On the Sign-on screen or the Primary Option Menu screen, enter the following:

D in the OPTION field

1 or 3 in the TRANSACTION MODE field

the transaction ID in the IDENTIFIER field

the key of the segment in the KEY field

2. Press ENTER.

A Data Display screen similar to the screen shown in Figure 1-17 is displayed with a message. The Data Display screens can vary depending on the application and the location.

The TRX field is used to change the transaction mode and/or the transaction ID to be processed. The ID can be changed to another standard processing transaction ID or to a special processing transaction ID. Any value entered into the TRX field effectively terminates the current transaction processing. If the mode is changed (position 1 of the TRX field), the screen will be redisplayed with the new mode. When the segment to be viewed is changed (positions 2 and 3, TRX field), the key field also should be changed. Otherwise, the next screen displayed will be key selection to reach the target segment for the new segment to be viewed.

The KEY field is used to display the fully concatenated key for the segments being displayed. This field may be updated in any way that is consistent with segment key requirements. For instance, entering key information for a segment change saves iterations through the key selection process.

S A M P L E P R O B L E M			
REMOVE			
OPTION:		TRANSACTION: INVENTORY	
TRX: 3IV		KEY: 02RC07GF273J	0028011126
*** PRESS ENTER TO DELETE DATA ***			
PART NUMBER----	02RC07GF273J		DESCRIPTION---- RESISTOR
AREA-----	2		INV DEPT----- 80
PROJECT-----	111		DIVISION----- 26
UNIT PRICE-----	.00		UNIT-----
ATTR COAP-----	12		ATTR PLANNED--- 0
ATTR COAD-----			STOCK DATE-----
LAST TRANS-----	459		RQMNTS CURRENT- 26
RQMNTS UNPLAN--	0		ON ORDER----- 0
TOTAL STOCK----	26		DISB PLAN----- 240
DISB UNPLAN----	729		DISB SPARES---- 0
DISB DIVERS----	0		

Figure 1-17. Sample Data Display Screen

3. Press ENTER.

The segment is deleted and the Sample Data Display screen is shown with the 'DATA DELETED SUCCESSFULLY' message. Refer to Figure 1-18.

S A M P L E P R O B L E M			
REMOVE			
OPTION:		TRANSACTION: INVENTORY	
TRX: 3IV		KEY: 02RC07GF273J	0028011126
*** DATA DELETED SUCCESSFULLY ***			
PART NUMBER----	02RC07GF273J		DESCRIPTION---- RESISTOR
AREA-----	2		INV DEPT----- 80
PROJECT-----	111		DIVISION----- 26
UNIT PRICE-----	.00		UNIT-----
ATTR COAP-----	12		ATTR PLANNED--- 0
ATTR COAD-----			STOCK DATE-----
LAST TRANS-----	459		RQMNTS CURRENT- 26
RQMNTS UNPLAN--	0		ON ORDER----- 0
TOTAL STOCK----	26		DISB PLAN----- 240
DISB UNPLAN----	729		DISB SPARES---- 0
DISB DIVERS----	0		

Figure 1-18. Sample Data Display Screen with a Successful Delete Operation

Optionally you can add the segment back to the data base, as follows:

- To add the segment back, overwrite a 4 in the TRX field.
- Press ENTER. The screen is displayed again with the 'ENTER DATA FOR ADD' message.

- c. Press the ENTER key again. The segment is now reentered. See Figure 1-19.

S A M P L E P R O B L E M			
UPDATE		TRANSACTION: INVENTORY	
OPTION:	TRX: 5IV KEY: 02RC07GF273J	0028011126	
*** DATA ADDED SUCCESSFULLY ***			
PART NUMBER----	02RC07GF273J	DESCRIPTION----	RESISTOR
AREA-----	2	INV DEPT-----	80
PROJECT-----	111	DIVISION-----	26
UNIT PRICE-----	.00	UNIT-----	
ATTR COAP-----	12	ATTR PLANNED---	0
ATTR COAD-----		STOCK DATE-----	
LAST TRANS-----	459	RQMNTS CURRENT--	26
RQMNTS UNPLAN--	0	ON ORDER-----	0
TOTAL STOCK----	26	DISB PLAN-----	240
DISB UNPLAN----	729	DISB SPARES----	0
DISB DIVERS----	0		

Figure 1-19. Sample Data Display Screen with a Successful Message

4. Press ENTER. The screen is displayed again.
5. Check any messages on the screen and perform the appropriate action.
6. Enter data in one of the following fields:
 - a. OPTION field

For OPTION field values, see "Data Display OPTION Values."
 - b. TRX or KEY fields

If a new value is entered in the TRX or KEY fields (or key fields in the data display), the new transaction or key is processed.
 - c. Data data display fields

If any data display fields are modified, normal processing continues.

If none of the above conditions is encountered, the display is shown again with message ADFE191 indicating that no modification has been made to either the data or control fields.

DATA DISPLAY OPTION VALUES

Valid values for the OPTION field on the Data Display screen are:

- C - terminates the transaction and returns the user to the Primary Option Menu screen. Normally, C is entered when a display segment has been updated successfully and all work for this session has been completed, or a new Primary Option Menu option is desired (e.g. Message Sending or Display).
- E - causes error messages to be displayed. When errors have been encountered by the Auditor during its check of data entered, error message are generated. If only one message (less than 65 characters) is generated, it is displayed on the screen. If more than one error message or a long error message is generated, a

message is displayed instructing the user to enter E in the option field in order to view the error message generated. The screen on which this instruction message is displayed also shows the field in error highlighted. E is entered only when the highlighting of the field in error is insufficient to inform the user of the error condition. After the error message screen has been read, the operator can redisplay the original segment display screen to correct the error by pressing the ENTER key.

- K - causes the Primary Key Selection screen to be shown again with all the key fields reset to their initialized values.
- M - causes the retrieval and display of MORE target segment twin occurrences if the transaction was generated using the TWINS operand.
- N - causes the next target segment to be retrieved and a screen to be displayed. Option N is valid for modes 1, 3, 5, or 6 and causes the first DBPATH target segment to be retrieved. If a multiple path transaction is being processed, the N option only retrieves the next target segment from the first DBPATH target segment. If the mode is 5, the next target segment is retrieved and the screen is displayed for update. When there are no more targets, the message 'END OF DATA FOR TRXID ____' is displayed. Refer to Figure 1-20 and Figure 1-21 for examples of screens received when N is entered in the OPTION field.
- Q - terminates the application system and returns the user to the Sign-on screen. Normally Q is entered when it is desired to sign on again or as a quick exit. The existing conversation is terminated when the Q option is processed.
- R - causes the retrieval and display of the first page of target segment twin occurrences if the transaction was generated using the TWINS operand. This page does not necessarily start with the first target segment in the data base. This RESTART option uses the original key entered to start twin processing.
- S - causes the currently displayed data to be saved if the transaction mode entered is 2 or 4 and a new key has been specified for the same transaction ID. The next segment display screen will prompt - 'ENTER DATA FOR UPDATE' and will display the saved data for segments not found in the data base path (DBPATH). In addition, if non-key fields were changed when the S option was entered, those fields are mapped to the new screen for update. The S option initializes the TSEG specified segments and reinvokes preaudit (PRELIM) processing. For the saved DBPATH segments, the field changed flag is set on for any field with a non-initialized value. Note that this causes auditing of fields, if so specified with AUDIT=YES.
- X - causes the last screen in the current sequence to be shown again. The X option is valid for transactions specifying key selection (KEYSEL=YES). If an X is entered in the OPTION field on the Data Display screen, the Secondary Key Selection screen for the target level is displayed. The Secondary Key Selection screen shows the first occurrence of a segment since a greater than symbol is being simulated in the first portion of the key. If an X is entered on the Secondary Key Selection screen, either the Secondary Key Selection, the next higher level Secondary Key Selection screen, or a Primary Key Selection screen is displayed. From the Primary Key Selection screen, the screens can be backed up to the Secondary and Primary Option Menu screens. For a multiple path transaction, only the last processed DBPATH is used to return to the Secondary Key Selection screen. From the Primary Option Menu screen, a C must be entered to terminate the conversation.
- ? - causes a Help screen to be displayed. When the Help screen is displayed, pressing ENTER causes the Data Display Screen to be displayed.

S A M P L E P R O B L E M			
RETRIEVE			
OPTION:	TRX: 6IV	KEY: 02RC07GF273J	0028011126
PART NUMBER----	02RC07GF273J	DESCRIPTION----	RESISTOR
AREA-----	2	INV DEPT-----	80
PROJECT-----	111	DIVISION-----	26
UNIT PRICE-----	.00	UNIT-----	
ATTR COAP-----	12	ATTR PLANNED---	0
ATTR COAD-----		STOCK DATE-----	
LAST TRANS-----	459	RQMNTS CURRENT-	26
RQMNTS UNPLAN--	0	ON ORDER-----	0
TOTAL STOCK----	26	DISB PLAN-----	240
DISB UNPLAN----	729	DISB SPARES----	0
DISB DIVERS----	0		

Figure 1-20. Sample Data Display Screen Resulting from Option N

S A M P L E P R O B L E M			
RETRIEVE			
OPTION:	TRX: 6IV	KEY: 02RC07GF273J	0028011126
ADFE064 *** END OF DATA FOR TRXID IV ***			
PART NUMBER----	02RC07GF273J	DESCRIPTION----	RESISTOR
AREA-----	2	INV DEPT-----	80
PROJECT-----	111	DIVISION-----	26
UNIT PRICE-----	.00	UNIT-----	
ATTR COAP-----	12	ATTR PLANNED---	0
ATTR COAD-----		STOCK DATE-----	
LAST TRANS-----	459	RQMNTS CURRENT-	26
RQMNTS UNPLAN--	0	ON ORDER-----	0
TOTAL STOCK----	26	DISB PLAN-----	240
DISB UNPLAN----	729	DISB SPARES----	0
DISB DIVERS----	0		

Figure 1-21. Sample Data Display Screen Resulting from Option N

ADDING DATA (INEXPERIENCED USER)

Note: On the Sign-on screen the first character of the TRX field is the TRANSACTION MODE.

1. On the Sign-on screen or the Primary Option Menu screen, enter the following:

D in the OPTION field

2 or 4 in the TRANSACTION MODE field

2. Press ENTER. The Secondary Option Menu screen is displayed showing a list of the available transaction IDs.

3. Select a transaction. See details under the topic "Selecting a Transaction" on page 1-27.

4. Press ENTER.

If you entered key information on the Secondary Option Menu screen, go to Step 6.

If no key data was entered, the Primary Key Selection screen is displayed. Continue with Step 5.

5. Select a key. See "Selecting a Key" on page 1-29 for details on key selection.

6. Press ENTER.

A Data Display screen similar to the screen shown in Figure 1-22 is displayed.

The TRX field is used to change the transaction mode and/or the transaction ID to be processed. The ID can be changed to another standard processing transaction ID or to a special processing transaction ID. Any value entered into the TRX field effectively terminates the current transaction processing. If the mode is changed (position 1 of the TRX field), the screen will be redisplayed with the new mode. When the segment to be viewed is changed (positions 2 and 3, TRX field), the key field also should be changed. Otherwise, the next screen displayed will be key selection to reach the target segment for the new segment to be viewed.

The KEY field is used to display the fully concatenated key for the segments being displayed. This field may be updated in any way that is consistent with segment key requirements. For instance, entering key information for a segment change saves iterations through the key selection process.

S A M P L E P R O B L E M					
ADD		TRANSACTION: INVENTORY			
OPTION:	TRX: 4IV	KEY:	02RC07GF273J	0028011128	
*** ENTER DATA FOR ADD ***					
PART NUMBER----	02RC07GF273J		DESCRIPTION----	RESISTOR	
AREA-----	2		INV DEPT-----	80	
PROJECT-----	111		DIVISION-----	28	
UNIT PRICE-----	.00		UNIT-----		
ATTR COAP-----	0		ATTR PLANNED---	<u>0</u>	
ATTR COAD-----			STOCK DATE-----		
LAST TRANS-----	0		RQMNTS CURRENT-	<u>0</u>	
RQMNTS UNPLAN--	0		ON ORDER-----	0	
TOTAL STOCK----	0		DISB PLAN-----	0	
DISB UNPLAN----	0		DISB SPARES----	0	
DISB DIVERS----	0				

Figure 1-22. Sample Data Display Screen

7. Add the necessary data.

8. Press ENTER. The screen is displayed again.

9. Check any messages on the screen and perform the appropriate action.

10. Enter data in one of the following fields:

a. OPTION field

For OPTION field values, see "Data Display OPTION Values" on page 1-19.

b. TRX or KEY fields

If a new value is entered in the TRX or KEY fields (or key fields in the data display), the new transaction or key is processed.

c. Data display fields

If any data display fields are modified, normal processing continues.

If none of the above conditions is encountered, the display is shown again with message ADFE191 indicating that no modification has been made to either the data or control fields.

UPDATING DATA (INEXPERIENCED USER)

Note: On the Sign-on screen the first character of the TRX field is the TRANSACTION MODE.

1. On the Sign-on screen or the Primary Option Menu screen, enter the following:

D in the OPTION field

5 in the TRANSACTION MODE field

2. Press ENTER. The Secondary Option Menu screen is displayed showing a list of the available transaction IDs.

3. Select a transaction. See details under the topic "Selecting a Transaction" on page 1-27.

4. Press ENTER.

If you entered key information on the Secondary Option Menu screen, go to Step 6.

If no key data was entered, the Primary Key Selection screen is displayed. Continue with Step 5.

5. Select a key. See "Selecting a Key" on page 1-29 for details on key selection.

6. Press ENTER.

A Data Display screen similar to the screen shown in Figure 1-23 is displayed. The Data Display screens can vary depending on the application and the location.

The TRX field is used to change the transaction mode and/or the transaction ID to be processed. The ID can be changed to another standard processing transaction ID or to a special processing transaction ID. Any value entered into the TRX field effectively terminates the current transaction processing. If the mode is changed (position 1 of the TRX field), the screen will be redisplayed with the new mode. When the segment to be viewed is changed (positions 2 and 3, TRX field), the key field also should be changed. Otherwise, the next screen displayed will be key selection to reach the target segment for the new segment to be viewed.

The KEY field is used to display the fully concatenated key for the segments being displayed. This field may be updated in any way that is consistent with segment key requirements. For instance, entering key information for a segment change saves iterations through the key selection process.

S A M P L E P R O B L E M

```

UPDATE
OPTION:      TRX: 5IV  KEY: 02RC07GF273J      0028009126
*** ENTER DATA FOR UPDATE ***
PART NUMBER---- 02RC07GF273J      DESCRIPTION---- RESISTOR
AREA----- 2      INV DEPT----- 80
PROJECT----- 091      DIVISION----- 26
UNIT PRICE----- .00      UNIT----- 0000
ATTR COAP----- 0      ATTR PLANNED--- 0
ATTR COAD----- 0      STOCK DATE----- 516
LAST TRANS----- 517      RQMNTS CURRENT- 17
RQMNTS UNPLAN-- 0      ON ORDER----- 0
TOTAL STOCK---- 17      DISB PLAN----- 57
DISB UNPLAN---- 700      DISB SPARES---- 0
DISB DIVERS---- 0

```

Figure 1-23. Sample Data Display Screen

7. Change the necessary data.
8. Press ENTER. The screen is displayed again.
9. Check any messages on the screen and perform the appropriate action.
10. Enter data in one of the following fields:
 - a. OPTION field

For OPTION field values, see "Data Display OPTION Values" on page 1-19.
 - b. TRX or KEY fields

If a new value is entered in the TRX or KEY fields (or key fields in the data display), the new transaction or key is processed.
 - c. Data display fields

If any data display fields are modified, normal processing continues.

If none of the above conditions is encountered, the display is shown again with message ADFE191 indicating that no modification has been made to either the data or control fields.

RETRIEVING DATA (INEXPERIENCED USER)

Note: On the Sign-on screen the first character of the TRX field is the TRANSACTION MODE.

1. On the Sign-on screen or the Primary Option Menu screen, enter the following:
 - D in the OPTION field
 - 6 in the TRANSACTION MODE field
2. Press ENTER. The Secondary Option Menu screen is displayed showing a list of available transaction IDs.

3. Select a key. See "Selecting a Key" on page 1-29 for details on key selection.

4. Press ENTER.

A Data Display screen similar to the screen shown in Figure 1-24 is displayed. The Data Display screens can vary depending on the application and the location.

The TRX field is used to change the transaction mode and/or the transaction ID to be processed. The ID can be changed to another standard processing transaction ID or to a special processing transaction ID. Any value entered into the TRX field effectively terminates the current transaction processing. If the mode is changed (position 1 of the TRX field), the screen will be redisplayed with the new mode. When the segment to be viewed is changed (positions 2 and 3, TRX field), the key field also should be changed. Otherwise, the next screen displayed will be key selection to reach the target segment for the new segment to be viewed.

The KEY field is used to display the fully concatenated key for the segments being displayed. This field may be updated in any way that is consistent with segment key requirements. For instance, entering key information for a segment change saves iterations through the key selection process.

S A M P L E P R O B L E M			
RETRIEVE	TRANSACTION: INVENTORY		
OPTION:	TRX: 6IV	KEY: 02RC07GF273J	0028009126
PART NUMBER----	02RC07GF273J	DESCRIPTION----	RESISTOR
AREA-----	2	INV DEPT-----	80
PROJECT-----	091	DIVISION-----	26
UNIT PRICE-----	.00	UNIT-----	0000
ATTR COAP-----	0	ATTR PLANNED---	0
ATTR COAD-----	0	STOCK DATE-----	516
LAST TRANS-----	517	RQMNTS CURRENT-	17
RQMNTS UNPLAN--	0	ON ORDER-----	0
TOTAL STOCK----	17	DISB PLAN-----	57
DISB UNPLAN----	700	DISB SPARES----	0
DISB DIVERS----	0		

Figure 1-24. Sample Data Display Screen

5. Review the data.

6. Press ENTER. The screen is displayed again.

7. Check any messages on the screen and perform the appropriate action.

8. Enter data in one of the following fields:

a. OPTION field

For OPTION field values, see "Data Display OPTION Values" on page 1-19.

b. TRX or KEY fields

If a new value is entered in the TRX or KEY fields (or key fields in the data display), the new transaction or key is processed.

c. Data display fields that are modifiable

If any data display fields are modified, normal processing continues.

If none of the above conditions is encountered, the display is shown.

DELETING DATA (INEXPERIENCED USER)

Note: On the Sign-on screen the first character of the TRX field is the TRANSACTION MODE.

1. On the Sign-on screen or the Primary Option Menu screen, enter the following:

D in the OPTION field

1 or 3 in the TRANSACTION MODE field

2. Press ENTER. The Secondary Option Menu screen is displayed showing a list of the available transaction IDs.

3. Select a transaction. See the topic "Selecting a Transaction" on page 1-27 for details on transaction selection.

4. Press ENTER.

If you entered key information on the Secondary Option Menu screen, go to Step 6.

If no key data was entered, the Primary Key Selection screen is displayed. Continue with Step 5.

5. Select a key. See the topic "Selecting a Key" on page 1-29 for details on key selection.

6. Press ENTER.

A Data Display screen similar to the screen shown in Figure 1-25 is displayed. The Data Display screens can vary depending on the application and the location.

The TRX field is used to change the transaction mode and/or the transaction ID to be processed. The ID can be changed to another standard processing transaction ID or to a special processing transaction ID. Any value entered into the TRX field effectively terminates the current transaction processing. If the mode is changed (position 1 of the TRX field), the screen will be redisplayed with the new mode. When the segment to be viewed is changed (positions 2 and 3, TRX field), the key field also should be changed. Otherwise, the next screen displayed will be key selection to reach the target segment for the new segment to be viewed.

The KEY field is used to display the fully concatenated key for the segments being displayed. This field may be updated in any way that is consistent with segment key requirements. For instance, entering key information for a segment change saves iterations through the key selection process.

S A M P L E P R O B L E M			
REMOVE	TRANSACTION: INVENTORY		
OPTION:	TRX: 3IV	KEY: 02RC07GF273J	0028011126
*** PRESS ENTER TO DELETE DATA ***			
PART NUMBER----	02RC07GF273J	DESCRIPTION----	RESISTOR
AREA-----	2	INV DEPT-----	80
PROJECT-----	111	DIVISION-----	26
UNIT PRICE-----	.00	UNIT-----	
ATTR COAP-----	12	ATTR PLANNED---	0
ATTR COAD-----		STOCK DATE-----	
LAST TRANS-----	459	RQMNTS CURRENT-	26
RQMNTS UNPLAN--	0	ON ORDER-----	0
TOTAL STOCK----	26	DISB PLAN-----	240
DISB UNPLAN----	729	DISB SPARES----	0
DISB DIVERS----	0		

Figure 1-25. Sample Data Display Screen

7. Delete the necessary data.
8. Press ENTER. The screen is displayed again.
9. Check any messages on the screen and perform the appropriate action.
10. Enter data in one of the following fields:

a. OPTION field

For OPTION field values, see "Data Display OPTION Values" on page 1-19.

b. TRX or KEY fields

If a new value is entered in the TRX or KEY fields (or key fields in the data display), the new transaction or key is processed.

c. Data display fields

If any data display fields are modified, normal processing continues. In the case of a delete transaction, changing non-key data fields can cause a return to the Primary or Secondary Key Selection screens for key input. This is because an attempt has been made to modify segments that have deleted.

If none of the above conditions is encountered, the display is shown again with message ADFE191 indicating that no modification has been made to either the data or control fields.

SELECTING A TRANSACTION

Transaction selection is performed via the Secondary Option Menu screen as shown in Figure 1-26.

The transaction mode selected is shown on the same line as the SELECT field.

The SELECT field is two characters in length. In this field, the user will enter the transaction ID selected from the list. A 'C' or 'X' may also be entered. This will return control to the Primary Option Menu

screen. If the user wishes to end the session, he can enter Q and the Sign-on screen will be displayed.

The KEY field on this screen is fifty characters in length. The user may enter all or a part of the key information, or he may leave the field blank. The key selection routines use any key information entered to determine whether or not the user requires additional assistance in finding the target segment.

OPERATOR LOGICAL PAGING

When there are too many IMSADF II transactions to fit on a single screen, multiple logical pages are created. The page number of each page is displayed in the upper right hand corner of the screen and the literal 'LAST' is displayed on the last logical page.

The ACTION field is the "request-for-new-page" entry field. The following functions are available to the operator after the first physical page of the output message is displayed:

- Enter = to display the next logical page of the message.
- Enter =n to display a specific logical page of the message.
- Enter +=n to display the nth logical page past the current logical page.
- Enter -=n to display the nth logical page before the current logical page.
- Enter =L to display the last logical page of the message.

An ACTION of '+=1' will display the next page, an ACTION of '=-1' will display the previous page, and an ACTION of '=1' will restart the display at the first page. Program function keys 1, 2, and 3 respectively, have been defined to perform the same functions.

S E C O N D A R Y O P T I O N S E L E C T I O N		PAGE: 1
ACTION:	(C=RETURN TO PRIMARY MENU; Q=EXIT TO SIGNON)	LAST
UPDATE	MODE: 5 SELECT:	
KEY:		
PA - PART SEGMENT		
PD - STANDARD INFORMATION		
IV - INVENTORY		
CY - CYCLE COUNT		
CD - CLOSE/DISBURSE INVENTORY		

Figure 1-26. Secondary Option Menu Screen

To select a transaction:

1. Enter the code for the desired transaction ID in the SELECT field.

2. Press ENTER. The system checks the selected transaction ID to validate that this user is authorized to process that transaction in the mode specified.

Optionally, you can enter the key in the KEY field if the key is known. You may also change mode by entering the proper value in the MODE field.

Errors result in the redisplay of the screen with an appropriate error message. Figure 1-27 is an example of the selection of a transaction not in the authorized list.

S E C O N D A R Y O P T I O N S E L E C T I O N		PAGE: 1
(C=RETURN TO PRIMARY MENU; Q=EXIT TO SIGNON)		LAST
ACTION:	MODE: SELECT: XX	
UPDATE		
KEY:		
ADFE050 INVALID TRANSACTION SELECTION		
PA - PART SEGMENT		
PD - STANDARD INFORMATION		
IV - INVENTORY		
CY - CYCLE COUNT		
CD - CLOSE/DISBURSE INVENTORY		

Figure 1-27. Secondary Option Menu Screen with Invalid Transaction

3. Return to your main operation procedures.

SELECTING A KEY

Key selection is performed via the Primary and Secondary Key Selection screens.

To select a key:

1. Enter part or all of the key data in the KEY field.

Following are two examples of the Primary Key Selection screen.

EXAMPLE 1

In the sample screen, shown is Figure 1-28, PART NUMBER is the key field of the root segment and INVENTORY LOCATION is the key of the target segment. INVENTORY LOCATION is subdivided into the fields shown to aid in picking an entry.

```

              S A M P L E   P R O B L E M
    P R I M A R Y   K E Y   S E L E C T I O N   S C R E E N
UPDATE          TRANSACTION: INVENTORY
OPTION:    TRX: 5IV  KEY:
              ** ENTER THE FOLLOWING KEY INFORMATION **
PART NUMBER-
00-----
AREA-----
INV DEPT----
PROJECT-----
DIVISION----
FILLER-----

```

Figure 1-28. Primary Key Selection Screen (Example 1)

EXAMPLE 2

Figure 1-29 illustrates the Primary Key Selection screen with a portion of the PART NUMBER field entered. The > indicates that a generic key search will be done for part numbers beginning with 02R. The > can be entered at any level of the data base path. The Secondary Key Selection module unqualifies the SSA of any segment (root or dependent) if the > is entered in the first position of the segment's key or if no > is found (automatic browsing when the segment is not found). If keys are not in ascending order, the generic key search will not work properly.

Fields with alphabetic or alphanumeric data (TYPE=ALPHA,ALPHANUM) will initially appear on the screen as blanks. All others will appear as zeros.

```

              S A M P L E   P R O B L E M
    P R I M A R Y   K E Y   S E L E C T I O N   S C R E E N
UPDATE          TRANSACTION: INVENTORY
OPTION:    TRX: 5IV  KEY:
              ** ENTER THE FOLLOWING KEY INFORMATION **
PART NUMBER- 02R>
00-----
AREA-----
INV DEPT----
PROJECT-----
DIVISION----
FILLER-----

```

Figure 1-29. Primary Key Selection Screen (Example 2)

2. Press ENTER. If all the key data was entered, the Data Display screen is displayed. Return to your main operation procedures.

If part of the key data was entered, the Secondary Key Selection screen is displayed. This screen contains all occurrences of segments at the level for which no key or a partial key was entered. Figure 1-30 illustrates the Secondary Key Selection screen resulting from the key entry in the Primary Key Selection screen shown in Figure 1-29.

S E C O N D A R Y K E Y S E L E C T I O N		
UPDATE	TRANSACTION: INVENTORY	
OPTION: F	TRX: 5IV	KEY: 02R>
SELECTION: 1	PRESS ENTER TO VIEW ADDITIONAL SELECTIONS	
	PART NUMBER	DESCRIPTION
1	02RC07GF273J	RESISTOR
2	02106B1293P009	RESISTOR
3	02250236-001	CAPACITOR
4	02250239	TRANSISTOR
5	02250241-001	CONNECTOR
6	02250794	RESISTOR
7	02250796	SWITCH
8	02250891	SERVO VALVE
9	02252252-003	COUPLING
10	023003802	CHASSIS
11	023003806	SWITCH
12	023007228	HOUSING
13	023008027	CARD FRONT
14	023009228	CAPACITOR
15	023009270	HOUSING
16	023009280	HOUSING CONV
17	023013405-002	MOUNTING
18	023013412	COVER

Figure 1-30. Secondary Key Selection Screen

Figure 1-31 illustrates the Secondary Key Selection screen for the second level, IV. This screen lists all occurrences of INVENTORY LOCATION segments for the selected PART NUMBER segment.

```

S E C O N D A R Y   K E Y   S E L E C T I O N

UPDATE      TRANSACTION: INVENTORY
OPTION:     TRX: 5IV      KEY: 02RC07GF273J
SELECTION: 2      *** ENTER A SELECTION NUMBER FROM THIS SCREEN ***

      INVENTORY      UNIT      CURRENT      ON      TOTAL      DISBURSEMENTS
      LOCATION      PRICE      REQMNTS      ORDER      STOCK      PLANNED      UNPLANNED
1      00 AK24527      2.40      33      0      33      1      700
2      0028009126      .00      17      0      17      57      700
3      0028011126      .00      26      0      26      240      729

```

Figure 1-31. Secondary Key Selection Screen

3. Make your selection by entering the number in the SELECTION field on the Secondary Key Selection screen shown in Figure 1-31.
4. Press ENTER.

If there are more than 18 segments to be displayed, there will be more than one Secondary Key Selection screen.

To page forward, press ENTER.

To return to the first screen at the level, enter R in the OPTION field.

If additional key levels are required, the next level Secondary Key Selection screen is displayed.

5. Return to your main operation procedures.

HANDLING MULTIPLE DATA DISPLAY SCREENS

A Data Display screen may consist of multiple physical pages, as would occur if the amount of data to be displayed exceeded the capacity of the screen.

The format of a multiple page display is similar to the formats previously described, with the following differences:

- Header information (such as segment ID and key) appears only on the first page.
- An operator ACTION field appears on each page.

Normal operation consists of using ENTER to advance a single physical page at a time. (No provision exists to selectively bypass pages.) Use of ENTER on the last physical page makes the input available for processing. The terminal operator can force an early completion of the input by entering an 'E' (upper or lowercase) or depressing program function key 4. Entering R in the ACTION field (upper or lowercase) causes the display to return to the first physical page. Any input up to that point is ignored and must be reentered. Except for the entry of an 'E' or an 'R', the ACTION field must not be modified in any way. (It is pre-modified to a blank and a '1'.)

Figure 1-32 shows page 1 of a multiple-physical-page data display screen. Pressing ENTER causes the display of the second, and last, page as shown in Figure 1-33.

```

                S A M P L E  P R O B L E M

UPDATE   DATABASE: ASSEMBLY PARTS  TRANSACTION: INVENTORY STATUS
OPTION:   TRX: 5IV   KEY: 02RC07GF273J   0028009126   02

ACTION:  1   (PRESS ENTER TO DISPLAY NEXT PAGE)

*** ENTER DATA FOR UPDATE ***

PART NUMBER      : 02RC07GF273J
PART DESCRIPTION: RESISTOR

PART INFORMATION
  PROC CODE      : 74
  INVENTORY CODE : 2
  PLAN REV NO    :
  MAKE DEPT      : 1200
  COMM CODE      : 02
  RIGHT MAKE TIME : 6
  WRONG MAKE TIME : 6

```

Figure 1-32. First Page of Multiple-Page Data Display Screen

```

ACTION:  1   (ACTION: R RETURNS TO PAGE 1)
        - ENTER KEY ENTERS THE DATA -
        *** ENTER DATA FOR UPDATE ***

INVENTORY STATUS

AREA          : 2
INV DEPT      : 80
PROJECT       : 091
DIVISION      : 26
UNIT PRICE    :           .00
UNIT          : 0000
ATTR COAP     : 0
STOCK DATE    : 516
LAST TRANS    : 517
RQMNTS CURRENT : 17
RQMNTS UNPLANNED : 0
ON ORDER      : 0
TOTAL STOCK   : 17

```

Figure 1-33. Last Page of Multiple-Page Data Display Screen

USING TEXT UTILITY PROCESSING DISPLAYS

When the Text Utility Processing function gains control, a screen such as that shown in Figure 1-34 is displayed.

```

          A U D I T   D A T A   B A S E
UPDATE    TRANSACTION: AFA OPERATION TEXT
          TRX: 5AT   KEY:   MFC1MAUDMFPRPRID

OPTION:    SEQ1:    SEQ2:
          UPDATE
OPTIONS: C=TERMINATE, I=IGNORE CHANGES, Q=EXIT TO SIGNON,
          DLET=DELETE SEQ1 TO SEQ2, POS=POSITION TO SEQ1;
## -----1-----2-----
01 43MFPRPRID02 0830
02 67          70040000
04 67          00050000
05 06MFPRTBLE09060000
06 09MFPRPRKN07070000
07 09MFPRPRKV61610000
09 06MFPRTBLE10120000
10 09MFPRTBLE12120000
12 49          14140000
14 51MFPRTBLE16160000
16 61          18180000
18 58          20200000
20 A1MFPRTBLE22320000
22 49          24240000
24 51MFPRTBLE26260000

```

Figure 1-34. Sample Text Utility Display Screen

This screen can contain as many text segment occurrences under a designated parent segment as can fit on a display screen. The segment display area is divided into a key area and a data area. The key area contains keys of from 1 to 20 characters. The data area associated with each key can contain from 1 to 77 characters. Segments can be added, modified, or deleted as required.

The three input fields available are the OPTION, SEQ1, and SEQ2 fields. These fields allow the user to position, modify, delete, and display segments in the segment display area.

The OPTION field is four characters in length and contains one of the following values:

- C - Terminates the session and returns the user to the Primary Option Menu.
- Q - Terminates the session and returns the user to the Sign-on screen
- I - Requests that any changes made by this user to the text segments be ignored and the original screen be redisplayed.
- POS - Requests that the screen be positioned to the segment specified in the SEQ1 field. This indicates that the requested segment is to appear as the first line in the segment display area. It will be followed by up to 14 segments.
- DELET - Requests the block delete function. This function deletes all segments within the range of keys specified in the SEQ1 and SEQ2 fields, inclusive of that specified in SEQ2.

The SEQ1 and SEQ2 fields are used to describe the POS and DLET options as discussed above.


```

                                A U D I T   D A T A   B A S E
UPDATE                        TRANSACTION: AFA OPERATION TEXT
                                TRX: 5AT  KEY:  MFC1MAUDMFPRPRID

OPTION: DLET      SEQ1: 02 SEQ2: 04
                                UPDATE
OPTIONS: C=TERMINATE, I=IGNORE CHANGES, Q=EXIT TO SIGNON,
                                DLET=DELETE SEQ1 TO SEQ2, POS=POSITION TO SEQ1;
## -----1-----2-----
01 43MFPRPRID02  0830
02 67              70040000
04 67              00050000
05 06MFPRTBLE09060000
06 09MFPRPRKN07070000
07 09MFPRPRKV61610000
09 06MFPRTBLE10120000
10 09MFPRTBLE12120000
12 49              14140000
14 51MFPRTBLE16160000
16 61              18180000
18 58              20200000
20 A1MFPRTBLE22320000
22 49              24240000
24 51MFPRTBLE26260000

```

Figure 1-35. Sample Text Utility Display Screen

Figure 1-35 shows that segments with the keys 02 through 04 are to be deleted. Figure 1-36 shows the screen that is displayed when the delete operation is complete.

```

                                A U D I T   D A T A   B A S E
UPDATE                        TRANSACTION: AFA OPERATION TEXT
                                TRX: 5AT  KEY:  MFC1MAUDMFPRPRID

OPTION:                      SEQ1:      SEQ2:
                                ADFE011 DELETE COMPLETED ***
OPTIONS: C=TERMINATE, I=IGNORE CHANGES, Q=EXIT TO SIGNON,
                                DLET=DELETE SEQ1 TO SEQ2, POS=POSITION TO SEQ1;
## -----1-----2-----
26 61              28280000
28 55              30300000
30 01              38380000
32 49              34340000
34 51MFPRTBLE36360000
36 61              38380000
38 11MFPRPRKN39390000
39 09MFPRPRKV40400000
40 11MFP2PRID42420000
42 09MFP2PRKY43430000
43 A2              44460000
44 09MFP2PRKN45450000
45 09MFP2PRKV63630000
46 11MFP2PRKN47470000
47 09MFP2PRKV48480000

```

Figure 1-36. Sample Text Utility Display Screen

When a Text Utility screen is entered, the system checks the OPTION field for a specific execution option. If no option is present, the system checks the data area for modifications to segments. If the text portion of a segment has been modified, the altered segment replaces the current segment in the data base. If a KEY field has been modified, the system checks it for collating sequence and places it in its proper place in the sequence of segments. The segment with the original key is not deleted. If a KEY field has been blanked, the segment is deleted from the data base.

New segments can be added by entering key and text data on a blank line of the screen. As many new segments can be added in one iteration of a screen as can fit in the data portion of the screen.

When text utility processing is complete, the operator enters C into the option field to return to the Primary Option Menu. If he wishes to terminate the session he enters Q and the Sign-on screen is displayed.

USING NONCONVERSATIONAL DISPLAY SCREENS

Under CICS/VS/OS, the nonconversational display screen is obtained by entering:

tttt xxxxxxxx

where,

tttt

is a one- to four-character transaction code, defined to CICS/VS/OS, which will give control to IMSADF II.

xxxxxxx

is the one- to eight-character Output Format Rule name for the desired transaction. (See the MODNAME operand of the GENERATE statement in the IMS Application Development Facility II Version 2 Release 2 Application Development Reference.)

Under IMS/VS, the nonconversational display screen is obtained by entering the IMS/VS /FORMAT command. Enter /FOR xxxxxxxx and press ENTER to display the desired screen, where xxxxxxxx is the appropriate IMS/VS MFS modname.

Data entered on the screen includes transaction mode (1 to 6) and data fields (keys and data). If the screen is a multiple-physical-page screen, the above described screen manipulation applies. If the nonconversational screen input caused an audit error, both the display screen with terminal operator input data and the error message screens are displayed. To obtain the error message page(s), operator logical paging requests are entered in the ACTION field. An ACTION =+1 (or PFK1) displays the first error screen. An ACTION =+1 (or PFK1) displays the first error screen page. If the error screen is displayed, depressing ENTER causes a return to the first segment display screen for data correction and entry. When data base update occurs, a modification message, as in conversational processing, is displayed on the message line.

Figure 1-37 shows the input (5,02RC07GF273J,00,2,80,091,26,33C) entered on the nonconversational screen, SAMPIV. SAMPIV was obtained by entering /FOR SAMPIV.

S A M P L E P R O B L E M						
DATABASE:		ASSEMBLY PARTS		TRANSACTION:		INVENTORY STATUS
TRX MODE:		5	TRX:		IV	
ACTION:		1	(PRESS PFK1 OR ENTER =+1 TO DISPLAY ERROR SCREEN)			
PART NUMBER		: 02RC07GF273J				
PART DESCRIPTION:		RESISTOR				
INVENTORY STATUS						
KEY	:	00	2	80	091	26
UNIT PRICE	:	33C				
UNIT	:					
LAST TRANS	:					
REQMNTS CURRENT	:					
ON ORDER	:					
TOTAL STOCK	:					

Figure 1-37. Nonconversational Screen

Figure 1-38 shows the result of the input entered on SAMPIV. Errors have been found and PFK1 is pressed to view the specific error(s). Figure 1-39 shows the error message.

S A M P L E P R O B L E M						
UPDATE DATABASE:		ASSEMBLY PARTS		TRANSACTION:		INVENTORY STATUS
TRX MODE:		5	TRX:		IV	
ACTION:		1	(PRESS PFK1 OR ENTER =+1 TO DISPLAY ERROR SCREEN)			
ADFE017 FOR ERRORS, =+1 IN ACTION OR PRESS PF1						
PART NUMBER		: 02RC07GF273J				
PART DESCRIPTION:		RESISTOR				
INVENTORY STATUS						
KEY	:	00	2	80	091	26
UNIT PRICE	:	33C				
UNIT	:					
LAST TRANS	:					
REQMNTS CURRENT	:					
ON ORDER	:					
TOTAL STOCK	:					

Figure 1-38. Nonconversational Screen Resulting with Error

) A D F TRANSACTION MESSAGES

ACTION: 1 LAST ERROR PAGE

PAGE: 001

ADFD103 NON-NUMERIC CHARACTER ENCOUNTERED IN DATA FIELD

Figure 1-39. Error Messages for Nonconversational Screen

Entering Concatenated Key from IBM 5550 Terminal

When IBM 5550 multi-station is used and a Double Byte Character Set (DBCS) field is a key field, DBCS key data in the concatenated key is recognized surrounding Shift Out/Shift In (SO/SI) characters. This means the concatenated key length is longer than the actual concatenated key by two bytes per DBCS key field.

IMSADF II supplies SO/SI characters before and after DBCS fields on the screen when the concatenated key is displayed.

When the concatenated key is entered from the terminal, the DBCS key (ALT + SBCS key) is used to enter the DBCS key data. This causes the terminal to insert SO/SI characters surrounding the DBCS characters.

CHAPTER 2. BATCH OPERATIONS

THE BATCH DRIVER

Under CICS/VS/OS, the batch driver is started by entering a transaction code from a CICS/VS/OS terminal:

tttt ssssBDxx

where,

tttt

is a one- to four-character transaction code, defined to CICS/VS/OS, which will give control to IMSADF II.

sssBDxx

is the name of the PSB (if one is required) and is also the name of the batch driver to be executed. (ssss is the IMSADF II system ID and xx is the batch driver program ID defined by the PGMID operand of the GENERATE statement.)

Under IMS/VS, the batch driver is started by submitting JCL to execute as an IMS/VS batch or BMP job. The name of the PSB and the batch driver to be executed are specified in the EXEC parms. (See IMS/VS procedures DLIBATCH, DBBBATCH, and IMSBATCH in the IMS/VS Systems Programmers Reference Manual.)

BATCH DRIVER TRANSACTION INPUT

Input to the Batch Driver is an OS/VS sequential data set that contains transactions. This data set is identified to the Batch Driver with a DDNAME of TRANSIN. The record format (RECFM) can be fixed or variable and the record length (LRECL) can be up to 255 bytes. Up to 25 card images (fixed length, 80-character records) can make up one transaction. However, multiple records are only allowed for card image input. This allows 2000 bytes of input data to the Batch Driver for one transaction.

The Batch Driver interrogates the DCB at OPEN time to determine the characteristics of the TRANSIN data set. The input may consist of sign-on transactions, sign-off transactions, comments, print control commands, checkpoint commands, or data base transactions. The descriptions of the input follow:

1. Sign-on transaction

SIGNON pg userid lockword

where

SIGNON	=	columns 1-6 and indicates that this is a sign-on transaction.
pg	=	columns 8-9 and is the project/group.
userid	=	columns 11-16 and is the user ID.
lockword	=	(optionally) columns 18-25. If specified, the user must specify a lockword exit.

For example:

SIGNON YY 999999

2. Sign-off transaction

SIGNOFF is in columns 1-7. Optionally specified if a user has signed on. Can be included prior to another sign-on transaction or at end of input data.

Note: SIGNON=YES must be specified in the Batch Driver Rule.

3. Comments

* any text

where

* is in column 1

any text starts in column 2

For example,

* THIS IS A COMMENT

4. Printer control commands

EJECT in columns 2-6 causes the printer output to skip to a new page

SPACE n 'SPACE' in columns 2-6

n in column 8, where 'n' is 1, 2, or 3 which represents the number of lines to be skipped.

MSG=n MSG= in columns 2-5 specifies the detail level of the audit and data base messages to be printed.

- when n=0 (default), messages are not expanded
- when n=1, data base messages (CANNOT ADD SEGMENT - DATA ALREADY EXISTS AND REQUESTED DATA NOT FOUND FOR SPECIFIED KEYS) are expanded with key fields of the DBPATH segment in error. Refer to Figure 2-1 for an example.
- when n=2, audit errors and warning messages are expanded as shown in Figure 2-1

MSG=(n,n) when MSG=(1,2), both data base and audit messages are expanded. A value of 0 resets the message level to no expansion.

5. Checkpoint command

CHKPT in columns 1-5 indicates that a checkpoint is to be taken at this point. CHKPT=YES must be specified in the Batch Driver Rule.

For additional information on batch checkpoint/restart, see the IMS Application Development Facility II Version 2 Release 2 Application Development Guide.

6. Data base transactions

Data base transactions describe actions to be taken against data base segments. The format of the input record is as follows:

ssssBmxx transaction input as described in the Input Transaction Rule

where

ssssBmxx (in the first eight positions of the input transaction record) is the transaction name where:

ssss = major application system identification
B = the constant 'B' to indicate batch mode processing
m = transaction mode (1 to 5 for Standard Processing)
(1 to 6 for Special Processing)
xx = Standard or Special Processing transaction ID to
identify the Input Transaction Rule

transaction input...is self-explanatory.

The first eight positions of the record must contain the transaction name. However, if CNT=2 or more in the Input Transaction Rule, a transaction is made up of more than one card image record (fixed length, 80-character). In this case, the transaction name does not appear in the first eight positions of the second and subsequent records. If the record is variable in length, the transaction name occurs after the record length field. Following the transaction name is the transaction data whose position and length are determined by the associated Input Transaction Rule. A FLDP05 operand exists for each input field in the transaction record that is to be mapped to a data base or pseudo segment. Additionally, DISP=YES must be specified for each input field from a non-target segment in the data base path. FLDP05 specifies the field position in the input, and TYPE specifies the length and data representation of the field to be mapped. Valid data conversions are covered in the IMS Application Development Facility II Version 2 Release 2 Application Development Guide.

If an input field contains blanks, it is not mapped to the data base or pseudo segment. However, a data base field may be blanked in one of two ways:

1. The input field contains '#' in the first position followed by blanks to fill out the field, or
2. The entire input field contains underscore ('_') characters.
3. Special Case: A field which has a length of 1 will be blanked if the input contains a pound sign (#) or an underscore (_).

The following is an example of a data base TRANSIN record:

MFC1B3SR MX 580601

The Input Transaction Rule, MFC1BSR, will be used to process this transaction message. The positions of MX and 580601 must correspond to FLDP05 operands in the Input Transaction Rule.

If more than one 80-byte record makes up a transaction as is indicated by the CNT operand in the Input Transaction Rule, the transaction can be ended early with a \$\$ after the last input field. For example, if CNT=3 but only 2 cards are needed for the particular transaction, the \$\$ would be specified on the second card. The Batch Driver would then pad the remainder of the transaction with blanks.

BATCH DRIVER TRANSACTION OUTPUT

Printer output provides a log of the processed transaction messages. Each transaction is printed as are any error or success messages resulting from the transaction processing. The count of each input record is included when that record is printed. Additionally, the data base transaction count is included with the error or success message for that transaction.

For audit errors or warning messages, an information line follows the error message when the message control is 2 (MSG=2). Its contents are the names of the field in error, the input message offset (if input) and the error field contents. For the data base not found and any already existing messages, the error messages include the name and value of the key field(s) in error, when MSG=1. Key field that are not input (KDISP=NO) will not show a value for the input message offset. An example of Batch Driver output is shown in Figure 2-1.

```

PAGE 000001                                MESSAGE DEMONSTRATION                                09 20 82
TIME= 16:16:289                            -----1-----2-----3-----4-----5-----6-----7-----8
RECORD # 00001 * EXAMPLE OF SUCCESSFUL DATA BASE ADD
RECORD # 00002 BANKB4EMWARBUCKS      001020101000003190 1000.00 07/12/82CREDACCT
TRANSACTION # 00001 *** SEGMENT ADDED SUCCESSFULLY ***
RECORD # 00003 MSG=(1,2)  REQUEST EXPANDED AUDIT AND DATA BASE ERROR MSGS
RECORD # 00004 * EXAMPLE OF ERROR MESSAGE GENERATED THROUGH USER AUDITS
RECORD # 00005 BANKB5CEWARBUCKS      001020101000002130 5000.00
*** ERROR *** TRANSACTION # 000002 0600 ENTERED CREDIT LIMIT ( 5000.00) EXCEEDS THE ALLOWED MAXIMUM 2000.00
*** ERROR *** TRANSACTION # 000002 0600 ERROR FIELD (BACECLIM) INPUT MESSAGE OFFSET (000039 ) FIELD CONTENTS= 5000.00

RECORD # 00007 * EXAMPLE OF REQUEST DATA NOT FOUND MESSAGE
RECORD # 00008 BANKB5CEDOE            001020101000002130 850.00
*** ERROR *** TRANSACTION # 000003 REQUESTED DATA NOT FOUND FOR SPECIFIED KEYS **
*** ERROR *** TRANSACTION # 000003 ERROR FIELD (BACRLNAM) INPUT MESSAGE OFFSET (000009 ) FIELD CONTENTS=DOE
*** ERROR *** TRANSACTION # 000003 ERROR FIELD (BACRCS#) INPUT MESSAGE OFFSET (000021 ) FIELD CONTENTS=001020

RECORD # 00010 * EXAMPLE OF DATA ALREADY EXISTS MESSAGE
RECORD # 00011 BANKB4CEWARBUCKS      001020101000002130 850.00
*** ERROR *** TRANSACTION # 000004 *** CANNOT ADD SEGMENT - DATA ALREADY EXISTS ***
*** ERROR *** TRANSACTION # 000004 ERROR FIELD (BACEACT#) INPUT MESSAGE OFFSET (000027 ) FIELD CONTENTS=101000002130

*** END OF INPUT ***

```

Figure 2-1. Example of Batch Driver Output

The Batch Driver optionally issues a Write-to-Operator-with-Reply (WTOR) at the start of execution. Its purpose is to provide the operator with the capability to stop a long running batch job in an orderly fashion. The WTOR is requested during rules generation. It is suggested that the message contain instructions to reply 'STOP'. An OS/VS sequential data set with a DDNAME of TRANSOUT is created when an OS/VS System Operator replies 'STOP' to the outstanding WTOR. Prior to reading each transaction, the Batch Driver checks to see if the operator has replied 'STOP'. If so, the Batch Driver writes the remaining unprocessed transactions to TRANSOUT and terminates. When the batch job is resubmitted, the TRANSIN DDNAME is changed by the user to point to the newly created TRANSOUT data set. In this way, processing can begin where it left off.

An alternative to the WTOR is a Write-to-Operator (WTO) request. This may be specified in rules generation as a means of identifying the batch run.

The Batch Driver will terminate with a return code corresponding to the highest severity of error encountered. A return code other than 0 is intended to alert the user to possible error conditions.

ERROR TRANSACTION DATA SETS

Transactions that are found to be in error may be written to a separate data set for correction and reprocessing. Also, error transactions and their corresponding messages may be written to a separate print data set in addition to being included in the regular output listing. The user will request these data sets by the inclusion of the following DD cards in the JCL:

//ERRTRX	DD (characteristics of the input data set) for the separate error transaction data set
//ERRMSG	DD (characteristics of PRINTER) for the separate error transaction and message data set.

CHAPTER 3. ERROR MESSAGES

The following error messages may be displayed during the course of executing the generated transactions. The messages have a four character prefix 'ADFD' or 'ADFE'.

- ADFD messages are present in the Message Data Base which is loaded at IMSADF II installation time.
- ADFE messages are included in one of the executable load modules.

The method of display depends on the mode of processing:

CONVERSATIONAL:

Regular error messages

On the segment display screen, fields in error are marked in high brightness and the user is invited to enter "E" to display the error messages. The user can enter "E" in the OPTION field and view the messages. If there is more than one page he presses PA1 to see the next page. Pressing ENTER will return to the data display.

Serious error messages

You will receive the error message display without requesting it. Pressing ENTER will return to the Primary Option Menu.

Termination error messages

The terminal operator will receive IMS/VS message DFS555, indicating that a U0778 ABEND has occurred. Use PA2 to view the IMSADF II message text. The conversation is terminated.

NONCONVERSATIONAL:

Regular and serious error messages

The segment display screen appears with fields in error marked in high brightness and a notification that error messages are on the next page. Pressing PF1 or entering =+1 in the ACTION field will cause the messages to appear. Pressing PF2 or PF3 or entering ACTION =-1 or =1 will return to the data display.

Termination error messages

The terminal operator receives IMS/VS message DFS555 indicating that a U0778 ABEND has occurred. Use PA2 to view the IMSADF II message text.

BATCH:

Error messages appear in the listing of input records. They are clearly marked:

*** ERROR ***

MESSAGES FOUND IN THE MESSAGE DATA BASE

ADFD000 PROCESSING LOGIC ERROR FOR TRXID: tx. DL/I STATUS CODE = 'xx'

Explanation: An unexpected DL/I status code has been found while executing the transaction. The most common DL/I status codes are as follows. A full list appears in the IMS/VS Application Programming Reference Manual, SH20-9026.

Status

Code Cause

GE	Segment not found. Can occur after any Get call.
GB	End of data base encountered and segment not found. Can occur after Get Next calls.
GA	Segment found but hierarchical boundary crossed when using SGN function.
AC	Segment NAME or PARENT operands in Rules Generator statements inconsistent with PCB.
AK	Field NAME or segment KEYNAME operands in Rules Generator statements inconsistent with FIELD statements in DBD.
AM	Segment sensitivity or processing options in PCB inconsistent with call. This can be caused by allowing path calls at the PCB level but restricting them on certain segments. An AM status code can also be retrieved if a DLET call is issued against a segment that has no DLET eligibility.

User Response: Take action appropriate to the DL/I status code.

ADFD001 AUDIT ERROR OCCURRED - MESSAGE NUMBER MISSING FROM OPERATION DESCRIPTOR. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.

Explanation: Operation descriptors (FA, AA, and MA segments) in the Audit Data Base must have a number between 0001 and 9999 in the error message field (the sixth and final field) if they have a blank value (indicating an error) in the "next true" or "next false" position (the fourth or fifth fields in the operation descriptor).

User Response: Correct the audit on the field and sequence number specified.

ADFD029 ALL MESSAGES ON THIS SCREEN ARE CLASSIFIED AS WARNING. ENTER 'U' TO PROCEED WITH UPDATE.

Explanation: Self-explanatory.

User Response: Continue as instructed.

ADFD070 THIS TRANSACTION REQUIRES THAT FIELD (xxxxxxx) CONTAIN A VALUE OTHER THAN BLANK OR ZERO.

Explanation: A FIELD statement in the Rules Generator input has been marked REQUIRED=YES (REQ=Y) indicating that a non-initialized value must be entered at the terminal. However, the user has failed to enter it.

User Response: The field noted is in error. Correct and re-enter.

ADFD071 NON-ALPHA DATA IN ALPHA FIELD. FIELD NAME IS xxxxxxxx.

Explanation: A character other than A-Z was entered into a field defined as alphabetic.

User Response: Enter valid alphabetic characters.

ADFD072 NON-NUMERIC DATA IN NUMERIC FIELD. FIELD NAME IS xxxxxxxx.

Explanation: A character other than 0-9 was entered into a field defined as NUM, DEC, PD, or BIN.

User Response: Enter valid numeric characters.

ADFD073 RELATED FIELD REQUIRED FOR AUDIT CAN NOT BE LOCATED. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.

Explanation: An audit operation descriptor (FA, AA, or MA segment) has been coded with a related field name (in third field of operation descriptor) which does not match the name of any field in any of the segments defined in this transaction. Likely causes are as follows:

1. The format of the related field name must be
 ssxxffff
 where:
 ss is first two characters of system ID,
 xx is segment ID,
 and ffff is field ID.
 A common mistake is to omit the prefix ssxx.
2. The field ffff does not exist in the specified segment xx.
3. The segment xx is not defined in this transaction. Segments are defined in a transaction by means of the GENERATE TRXID=tx statement with an OPTION value including INTR, TPALL, TPIT, or BAIT. The defined segments are those that are:
 - a. named in the DBPATH operand (target and, where necessary, higher level segments);
 - b. implied by having a dependent segment named in the DBPATH operand and by having at least one field displayed (conversational processing) or updatable (nonconversational and batch processing);
 - c. named in the TSEGS operand.

User Response: Correct as appropriate.

ADFD079 CHARACTER VALUE FOR CONVERSION TO BIT IS NOT 0 OR 1. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.

Explanation: Data moved or compared to a bit field must be either a single 0 or 1.

User Response: Enter valid bit characters in the named field.

ADFD080 SCAN POSITION IS NOT SET TO 1 AT THE BEGINNING OF AUDIT DATA CONVERSION. CONTACT PROGRAMMER RESPONSIBLE FOR THE AUDITOR MODULE.

Explanation: This message can be caused by an incorrectly formatted data descriptor segment (DF, DA, or DM). A data descriptor must begin with a left parenthesis in column 1 and be terminated with a right parenthesis on the same or on the first or second continuation (maximum three lines).

User Response: Correct the data descriptor segment.

- ADFD081** **MULTIPLE MINUS SIGNS ENCOUNTERED IN CONVERSION TO PACKED DECIMAL FORMAT. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** Negative data must be preceded by a single minus ('-') sign.
- User Response:** Correct the field and re-enter.
- ADFD082** **MULTIPLE DECIMAL POINTS ENCOUNTERED IN CONVERSION TO PACKED DECIMAL FORMAT. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** Only one decimal point may appear in a decimal or packed decimal field.
- User Response:** Correct the field and re-enter.
- ADFD083** **INVALID DATA ENCOUNTERED IN VALUE TO BE CONVERTED TO PACKED DECIMAL FORMAT. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** A character other than + - . 0-9 was encountered in the named field. Alpha data or blanks cannot be converted to packed decimal.
- User Response:** Correct the field and re-enter.
- ADFD085** **SEGMENT HANDLER PARAMETER LIST IS INVALID.**
- Explanation:** Probably caused by a bad parameter list passed from a Special Processing Routine on a SEGHNDLR call.
- User Response:** Check Special Processing Routine for parameters passed in the call.
- ADFD086** **INVALID MONTH OR DAY IN A DATE FIELD. FIELD NAME IS xxxxxxxx**
- Explanation:** The month must be 1-12 and the day must be 1-31 as appropriate for the month.
- User Response:** Enter a valid date.
- ADFD087** **INVALID OPERATION CODE USED IN AUDIT OPERATION DESCRIPTOR. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The operation code used in the named audit was invalid. Refer to the valid operation descriptor codes in Chapter 5 of the IMS Application Development Facility II Version 2 Release 2 Application Development Reference.
- User Response:** Change the operation descriptor to have a valid operation code.
- ADFD088** **VALUE IS TOO LARGE TO CONVERT TO A BINARY NUMBER. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The value for a field that is to be converted to binary must be between +2,147,483,647 and -2,147,483,647 (commas added here for readability).
- User Response:** Enter a valid number.
- ADFD089** **INVALID ARITHMETIC OPERATION (DIVIDE BY ZERO). AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The value of the divisor in a divide operation was zero, which is not allowed.
- User Response:**
1. Verify the data that was entered.
 2. Include a check in the audit for a value of zero before dividing.

- ADFD090** **INVALID SEGMENT ID SPECIFIED IN AUDIT DATA BASE CALL. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The segment id was not recognized in a data base call. It must be defined in a DBPATH or TSEG Rules Generator operand for this transaction.
- User Response:** Correct the audit or include the segid in the static rules.
- ADFD091** **ERROR OCCURRED IN DATA CONVERSION WHEN ATTEMPTING TO ASSIGN A VALUE TO A BASE OR RELATED FIELD. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The source data was not in a correct format to be converted to the target field. Examples of invalid conversion attempts are alphabetic to packed decimal, alphabetic to numeric, etc.
- User Response:** Correct the data and re-enter.
- ADFD092** **AUDITOR ATTEMPTED TO MODIFY ATTRIBUTE OF A FIELD NOT DISPLAYED ON THE SCREEN. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The field was not defined with DISPLAY=Y or specified as a field in a screen image.
- User Response:** Correct the Rules Generator input and recreate the rules and screens.
- ADFD093** **FORMAT OF DATA DESCRIPTOR IS INCORRECT FOR THE OPERATION REQUESTED. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** Self-explanatory.
- User Response:** Refer to Chapter 5 of the IMS Application Development Facility II Version 2 Release 2 Application Development Reference.
- ADFD094** **SWITCH NUMBER IS NOT SPECIFIED CORRECTLY. SPECIFY SW1-9. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The switch specified was not SW1-SW9.
- User Response:** Enter a correct switch in the audit rule.
- ADFD100** **INVALID BIT VALUE ENCOUNTERED. MUST BE '0' OR '1'.**
- Explanation:** A character other than 0 or 1 was found in a field defined as bit.
- User Response:** Enter valid bit characters.
- ADFD101** **MULTIPLE DECIMAL POINTS ENCOUNTERED IN DATA FIELD.**
- Explanation:** Only one decimal point may appear in a decimal or packed decimal field.
- User Response:** Correct the field and re-enter.
- ADFD102** **MINUS SIGN IS NOT THE FIRST CHARACTER ENCOUNTERED IN FIELD.**
- Explanation:** Negative data must be preceded by a single minus ('-') sign.
- User Response:** Correct the field and re-enter.
- ADFD103** **NON-NUMERIC CHARACTER ENCOUNTERED IN DATA FIELD.**
- Explanation:** Only the characters 0-9 are allowed in this field.
- User Response:** Correct the field and re-enter.

- ADFD104** **MULTIPLE MINUS SIGNS ENCOUNTERED IN DATA FIELD.**
- Explanation:** Negative data must be preceded by a single minus ('-') sign.
- User Response:** Correct the field and re-enter.
- ADFD107** **INVALID HEX CHAR. - MUST BE 'A'-'F' OR '0'-'9'.**
- Explanation:** This field is defined as hexadecimal. The only valid characters that may be entered are 0-9, A-F.
- User Response:** Correct the field and re-enter.
- ADFD108** **ERROR OCCURRED WHEN MOVING ACCUMULATOR COUNTER TO A TARGET FIELD. EITHER FIELD TOO SMALL OR SIGN LOST. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The full value of the accumulator was lost when moved to a field (code 62 or 63).
- User Response:** Determine if this is a problem and correct as appropriate.
- ADFD109** **ATTEMPTED AN ARITHMETIC OPERATION ON A FIELD WHICH WAS NOT NUM, DEC, PD, OR BIN. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** An arithmetic operation is allowed only on the above mentioned field types.
- User Response:** Change the audit descriptor.
- ADFD111** **FIELD ATTRIBUTES CANNOT BE BIT, BINARY OR PACKED DECIMAL FOR DATE ASSIGNMENT. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** A field selected for date assignment was defined as BIT, BIN, or PD.
- User Response:** Change the static or audit rules as appropriate.
- ADFD112** **FIELD ATTRIBUTES CANNOT BE BIT BINARY OR PACKED DECIMAL FOR TIME ASSIGNMENT. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** A field selected for time assignment was defined as BIT, BIN, or PD.
- User Response:** Change the static or audit rules as appropriate.
- ADFD113** **BIT OPERATION ATTEMPTED AGAINST A NON-BIT FIELD. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The audited field is not TYPE=BIT, but a bit operation was attempted.
- User Response:** Change the static or audit rules as appropriate.
- ADFD114** **ATTEMPTED TO TEST BIT,BINARY,OR PACKED DECIMAL FIELD FOR ALPHANUMERIC DATA. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** An alphameric audit was attempted against a field defined as BIT, BIN, or PD.
- User Response:** Correct the static or audit rules as appropriate.

ADFD115 **SEGMENT ID REQUESTED IN OPERATION IS NOT PRESENT IN THIS TRANSACTION. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**

Explanation: The segment ID was not specified in a DBPATH or TSEG operand for this transaction.

User Response: Correct the Rules Generator input and re-run.

ADFD116 **ATTEMPTED TO SEND A SECONDARY TRANSACTION VIA THE AUDITOR BUT THE ITRMOD NAME WAS INCORRECT. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**

Explanation: The ITRMOD name specified in the related field must match an ITRMOD in the Input Transaction Rule.

User Response: Correct the audit descriptor.

ADFD117 **WARNING MESSAGES ARE NOT ALLOWED IN PRIMARY OR SECONDARY KEY AUDITS. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**

Explanation: Warning messages are only valid in Preaudit and Standard Audit.

User Response: Correct the audit descriptors.

ADFD118 **THE OPERATION TO PROHIBIT SEGMENT DISPLAY IS VALID ONLY ON SECONDARY KEY SELECTION AUDITS. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**

Explanation: Operation code D6 cannot be used for Primary Key Audit, Preaudit, or Standard Audit.

User Response: Correct the audit descriptors.

ADFD119 **INVALID DATA IN A PACKED DECIMAL FIELD.**

Explanation: The packed field has either an invalid sign (not 'C', 'D', 'F') or non-numeric data in the field.

User Response: Correct the field and re-enter.

ADFD120 **CONFLICT ATTEMPTING TO SET A FIELD ATTRIBUTE. YOU CANNOT HIGHLIGHT/MODIFY MODE 7 OR UNPROTECT MODE 6. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**

Explanation: Non-display fields cannot be highlighted, and non-modifiable fields cannot be made modifiable.

User Response: Correct the audit rule.

ADFD121 **INVALID ATTRIBUTE SPECIFIED. ON SETTING COLOR, XHILT OR ATTRIBUTES. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**

Explanation: An invalid attribute was specified in the audit.

User Response: Correct the audit rule.

ADFD122 **ATTEMPTED TO TURN ON A DELETE FLAG WITH A SETFLAG OPERATION WITHOUT DELETE ELIGIBILITY. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**

Explanation: The segment must be specified with delete eligibility during generation of the Input Transaction Rule.

User Response: Correct the Rules Generator input and rerun.

- ADFD123** **INVALID OPERATION - ATTEMPTING TO MOVE A COUNTER FROM/TO A FIELD. MUST USE ARITHMETIC OPERATION (C4). AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** Internal counters 1-9 and F cannot be used in a move operation.
- User Response:** Refer to Chapter 5 of the IMS Application Development Facility II Version 2 Release 2 Application Development Reference.
- ADFD124** **OVERFLOW OCCURRED DURING AN AUDITOR MULTIPLY OPERATION. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The value became too large for the 8-character packed decimal accumulation counter.
- User Response:** Determine if this is a problem and correct as appropriate.
- ADFD125** **DATA VALUE ENTERED WAS TOO LARGE TO MAP IN TARGET FIELD. THE ORIGINAL VALUE IS REDISPLAYED TO THE SCREEN.**
- Explanation:** While trying to reformat data from screen or batch input the length was too large to fit in the target field.
- User Response:** The definition of the field should be checked to determine if the input length and field length are incompatible.
- ADFD126** **ATTEMPTED TO SET MORE THAN 100 ID'S IN SET TWIN OPERATION. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** A maximum of 100 segments can be referenced in an IMSADF II transaction.
- User Response:** Change the number of segments referenced.
- ADFD127** **FROM OR TO NUMBER IN DO-TWIN OPERATION OUT OF RANGE (1 TO NUMBER OF TWINS). AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The number specified can not be less than 1 or more than the number of IDs in the SETTWIN operation.
- User Response:** Adjust either the SETTWIN or DOTWIN operation to make them consistent.
- ADFD128** **ATTEMPTED TO DO A DO-TWIN OPERATION WITHOUT A PREVIOUS SET-TWIN. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** A DOTWIN operation cannot be performed without previously defining the twin IDs with a SETTWIN operation.
- User Response:** Code the DOTWIN operation.
- ADFD129** **ATTEMPTED TO MODIFY A PCB NUMBER VIA THE AUDITOR BUT THE SEGMENT ID SPECIFIED WAS INCORRECT. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The segment ID specified was not contained in the Input Transaction Rule.
- User Response:** Either correct the segment ID in the Auditor operation or add the segment to the Input Transaction Rule definition.

- ADFD130** TRUE/FALSE INDICATOR RETURNED FROM AUDIT EXIT IS INVALID.
VALID VALUES ARE X'00',X'80',X'C0'. AUDITED FIELD IS
xxxxxxx. SEQ# = nn.
- Explanation:** When an Audit exit returns to the Auditor it must
set the TRUE/FALSE indicator to one of the three values shown.
- User Response:** Check the user written exit to determine the
incorrect value and correct accordingly.
- ADFD131** OPEN FAILED FOR (SECTRX). SECONDARY TRANSACTION NOT WRITTEN.
- Explanation:** Attempted to send a secondary transaction to a
sequential data set in batch processing and the DD statement
(SECTRX) could not be opened.
- User Response:** Correct the DD statement (SECTRX) to point to a
sequential data set for output.
- ADFD132** A PACKED DECIMAL FIELD USED IN AN AUDIT HAS INVALID DATA.
- Explanation:** The packed decimal field has either an invalid
sign (not 'C', 'D', 'F') or non-numeric data in the field.
- User Response:** Correct the field.
- ADFD133** DUPLICATE KEY ON DATA BASE.
- Explanation:** Insert attempted on an existing segment
- User Response:** Rerun the transaction with corrected key.
- ADFD134** INVALID DATA TYPE FOR STRINGS.
- Explanation:** Invalid data type for concatenation or substring
operations. Data must be ALPHA, NUM or ALPHANUM and not
nulls.
- User Response:** Correct audit operation or data type.
- ADFD135** INVALID AUDIT OPERATION WAS ATTEMPTED FOR DBCS/MIXED FIELD.
AUDITED FIELD IS xxxxxxxx. SEQ# = nn.
- Explanation:** Operation descriptor code 41 or 43 was attempted
for DBCS or MIXED field.
- User Response:** Correct the audit rule.
- ADFD136** INVALID DBCS DATA WAS FOUND IN DBCS/MIXED FIELD. AUDITED
FIELD IS xxxxxxxx. SEQ# = nn.
- Explanation:** Unpaired SO/SI character or invalid DBCS code was
found in the audited DBCS or MIXED field.
- User Response:** Correct the DBCS data.
- ADFD137** INVALID FUNCTION IN DB2 CALL
- Explanation:** The function specified in a DB2 call does not
match one which was generated in the Table Handler Rule.
- User Response:** Verify that all standard and user defined
functions are present in the Table Handler Rule. Check any
audit initiated calls for a misspelled function or audit
initiated Secondary Key Selection calls for an invalid SQLKS
code.
- ADFD138** INVALID ASSIGNMENTS OF NULL DATA
- Explanation:** Attempted to set a counter or a field (not
specified as accepting nulls) to a null.
- User Response:** Correct audit or specify field to accept nulls.

- ADFD139** **ATTEMPTED TO PROCESS MORE THAN 5 NESTED AUDIT SUBROUTINES.**
- Explanation:** Audit subroutines may only be nested up to 5 deep. The audit routine attempted to go 6 deep.
- User Response:** Correct the Audit logic.
- ADFD140** **INVALID MOVE TO SPASQLKS. MUST BE 3 TO 9**
- Explanation:** The SQL key selection function code must be in the range of 3 to 9.
- User Response:** Correct the value.
- ADFD141** **DATA CONVERSION ERROR OCCURRED DURING MAPPER CALL AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** Data being moved during a mapper call could not be converted to the specified field type.
- User Response:** Check that the field types being mapped are valid data conversions. Data conversions are described in the IMS Application Development Facility II Version 2 Release 2 Application Development Reference.
- ADFD142** **SEGMENT TO BE USED IN MAPPER OR COPYSEG CALL WAS NOT FOUND AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** A segment in the map or COPYSEG statement does not exist in this transaction.
- User Response:** Either correct the segment ID used in the audit or include the segment in the transaction.
- ADFD143** **SEGMENT NOT FOUND WHILE ATTEMPTING TO TEST CHANGE FLAG AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**
- Explanation:** The segment being checked does not exist in the transaction.
- User Response:** Either correct the segment ID used in the audit or include the segment in the transaction.
- ADFD398** **THE INPUT TRANSACTION RULE SPECIFIES AUDITING ON A FIELD WHICH IS NOT DESCRIBED IN A SEGMENT LAYOUT RULE. CORRECT RULES BEFORE CONTINUING.**
- Explanation:** The terminal user cannot continue because the error condition persists even though no field is marked in error. There are three possible causes of this problem:
- An inconsistency exists between the Input Transaction Rule and the Segment Layout Rule that is corrected by regenerating them in the same run using the Rules Generator.
 - A User Audit Exit routine has set the TRUE/FALSE indicator to X'C0', but has not set a field in error with a SETERROR call.
 - A User Special Processing routine has set the return code to 8, but has not set a field in error using an Auditor call or using a SETERROR call.
- User Response:** Correct the Input Transaction Rule, the Segment Layout Rule, the User Audit Exit routine or the User Special Processing routine.

ADFD493 -MFC1V10- NOT ENOUGH SPACE AVAILABLE IN THE TABLE TO LOAD THE INPUT TRANSACTION RULE. SYSID=ssss.

Explanation: Refer to message ADFD499 or ADFD504.

User Response: Same.

ADFD494 NO SEGMENTS ARE SPECIFIED IN THE INPUT TRANSACTION RULE. THIS ERROR WAS FOUND BY THE INPUT TRANSACTION MAPPER (MFC1V43).

Explanation: As noted in the message.

User Response: The Input Transaction Rule needs DBPATH or TSEG segments.

ADFD495 INPUT TRANSACTION FIELD (xxxxxxx) COULD NOT BE FOUND IN THE SPA SEGMENT TABLE.

Explanation: A field is named for display or input and no Segment Layout Rule (OPT=SEGL or SGALL) has been generated. The Input Transaction Rule and the Segment Layout Rule are not consistent.

User Response: Regenerate the Segment Layout Rule.

ADFD496 INPUT TRANSACTION FIELD (xxxxxxx) CAN NOT BE FOUND IN THE SEGMENT LAYOUT RULE.

Explanation: Same as message ADFD495.

User Response: Same as message ADFD495.

ADFD497 INPUT TRANSACTION FIELD (xxxxxxx) CONTAINS DATA THAT IS INVALID FOR THE DATA TYPE SPECIFICATION.

Explanation: The data value stored in the data base is inconsistent with the type specified (e.g. blanks in a PD field, etc.).

User Response: Either redefine the data or correct the format of the stored values.

ADFD498 INPUT TRANSACTION FIELD (xxxxxxx) HAS AN INVALID DATA TYPE SPECIFICATION TO USE THE NET CHANGE (MODE=8) FEATURE.

Explanation: A field must be either (PO, DEC, or BIN) to have a MODE=8 designator. This mode is only valid for Nonconversational or Batch transactions.

User Response: Regenerate the rule with the correct mode.

ADFD499 INPUT TRANSACTION RULE FOR TRXID tx OVERFLOWS THE SPA.

Explanation: The Input Transaction Rule for the named transaction ID is too large to fit into the Scratch Pad Area (SPA).

User Response: Either

1. Increase the available space by using the Work Data Base (or by increasing the IMS/VS SPA size), or
2. Reduce the transaction's space requirements. One way to achieve such a reduction is to minimize the size of Segment Layout Rules by re-defining the data base segment with new segment IDs and only including the FIELD statements actually required for the particular transaction.

**ADFD501 FIELD RULE 'ssssSRss' LENGTH IS TOO LARGE FOR THE SPA.
-MFC1V10-**

Explanation: The named Segment Layout Rule is too large to fit into the SPA. 'ssss' is the system ID, and 'ss' is the segment ID. The SPA overflow has occurred during a load of a Segment Layout Rule. Refer to message ADFD499 or ADFD504.

User Response: Refer to message ADFD499 or ADFD504.

**ADFD504 THE SEGMENT 'ss' IS TOO LARGE FOR THE SPA. OR -MFC1V10-
STATUS CODE='xx'. UNEXPECTED RETURN CODE FROM SEGMENT HANDLER.**

Explanation:

1. The named segment is too large to fit into the SPA, or
2. An unexpected return code based on the listed DL/I status code was returned. The segment is probably too large, as in the first case.

Refer also to message ADFD499.

User Response: Refer also to message ADFD499.

ADFD506 BAD PARAMETER LIST FOR SEGMENT HANDLER. MODE & SEGID = mss.

Explanation: Logic error in the module calling the common segment handler.

User Response: Contact your systems programmer.

ADFD507 DATA CONVERSION ERROR FOR KEY FIELD xxxxxxxx. (MFC1V10)

Explanation: Data not convertible to the key field's data type.

User Response: Enter valid data associated with that data type.

**ADFD508 STATIC RULE xxxxxxxx NOT FOUND IN BATCH RULE LIST. CHECK
OPT=BDLE.**

Explanation: The named rule could not be found in the Batch Driver Rule.

User Response: Include the rule with the appropriate keyword on the GENERATE OPT=BDLE Rules Generator statement.

ADFD511 NO ACTION TAKEN ON TRXID xx. DL/I STATUS CODE = xx.

Explanation: A DL/I status code other than blank, GE, GB, or II has been received on a DL/I call, or there is no key selection available to display the keys in error.

User Response: Review the PSB, DBD, rules specifications, and audit logic to determine the reason for the DL/I status code.

ADFD512 * REQUESTED DATA NOT FOUND FOR SPECIFIED KEYS *****

Explanation: The key as entered could not be found.

User Response: Correct the key or change the mode to ADD (4).

ADFD513 * CANNOT ADD SEGMENT - DATA ALREADY EXISTS *****

Explanation: The data already exists in the data base.

User Response: Correct the key or change the mode to update.

ADFD515 KEY SELECTION DATA TABLES EXCEED THE AVAILABLE SPACE IN THE SPA.

Explanation: See message ADFD499 or ADFD504.

User Response: See message ADFD499 or ADFD504.

ADFD516 KEYBLD FIELD FOR KEY FIELD xxxxxxxx CANNOT BE LOCATED IN THE SPA.

Explanation: IMSADF II has been asked to build the key of a segment from data within another segment. This is requested by using the KEYBLD operand on the FIELD statement that defines the key field that is to be built. The field identified in the KEYBLD operand is the source from which the key is to be built. The following rules must be observed:

- The segment containing the source field must be loaded either by virtue of having at least one displayed (conversational mode) or modifiable (nonconversational or batch mode) field or by being named explicitly in the GENERATE TRXID statement.
- The source field must be in a segment that is loaded before the segment containing the key field that is built. This means that the segment containing the key field must be in a different hierarchical path from the segment containing the source field. Also, the target segment identifying the hierarchical path that contains the source field must appear in the DBPATH operand of the GENERATE TRXID statement before the target segment identifying the hierarchical path that contains the key field to be built.

User Response: Correct the static rules as suggested in the explanation.

ADFD518 SEGMENT xxxxxxxx HAS BEEN SPECIFIED IN DBPATH TO BE LOADED BUT HAS NO KEY FIELDS.

Explanation: In order for a segment to be loaded, it must have fields defined as KEY=Y.

User Response: Change the static rules as appropriate.

ADFD519 COFIELD FIELD xxxxxxxx CANNOT BE LOCATED IN SPA. REGEN ITR TO INCLUDE COFIELD PSEUDO SEGMENT.

Explanation: A key field in a DBPATH segment has indicated that a COFIELD contains an alternate display for that key, but the identified COFIELD cannot be found in the Input Transaction Rule or in a Segment Layout Rule.

User Response: Re-verify the rules source, and if the input looks correct, contact your systems programmer.

ADFD520 INITIALIZATION OF SPA SEGMENT IOAREA CAUSES A NEGATIVE MOVE FOR TRXID mtt. SPALEGT = nnnn. RECHECK PSB FOR INCLUSION OF WORK DATA BASE.

Explanation: Module MFC1V10 is clearing the segment IOAREAS in the SPA and has calculated a negative length of the field to be cleared. This problem happens when the SPA size is bytes, but the HDAM Work Data Base PCB has not been included in the application PSB.

User Response: Correct the PSB and run again.

ADFD521 NOT ENOUGH COMM-AREA TO MAP SEGMENT --.

Explanation: The communication area is not large enough to hold the segment assigned to it.

User Response: Increase the size of the communication area.

ADFD522 NO ACTION - PROCESSING ERROR DB2 SQLCODE = xx

Explanation: A DB2 error has occurred. All I/O action has been terminated.

User Response: Contact your systems programmer.

ADFD523 INVALID FUNCTION IN DB2 CALL

Explanation: The function specified in a DB2 call does not match one which was generated in the Table Handler Rule.

User Response: Verify that all standard and user defined function are present in the Table Handler Rule. Check any audit initiated calls for a misspelled function or audit initiated Secondary Key Selection calls for an invalid SQLKS code.

ADFD524 INVALID TRANSACTION MODE FOR ESDS FILE.

Module: MFC1C09V

Explanation: The only valid transaction mode for VSAM Entry Sequenced Data Sets (ESDS) is 4 - Add. An ESDS is supported only for output.

User Response: Correct the transaction mode and rerun the Rules Generator.

ADFD800 'xxxxxxx' KEY NOT FOUND - HEADER SEGMENT (HD). STATUS='xx'

Explanation: Status is usually 'GE'. In interpreting the audit rules, a next true or next false condition of blank was found, followed by an error message number. However, no message of this number was found on the Message Data Base.

User Response: Use the HD transaction to create a message header and SY to define message text. The key of the header is of the form:

ssssnnnn

where:

ssss is the application system ID,
and nnnn is the error message number.

Note: Message number can be triggered also by an AR (automatic message routing) segment.

ADFD801 DATA BASE ERROR - HEADER SEGMENT (HD). KEY='xxxxxxx'. STATUS='xx'

Explanation: A data base error was encountered when attempting to retrieve the message header segment.

User Response: See your system programmer. See action appropriate to the DL/I status code.

ADFD802 KEY NOT FOUND - AUTOMATIC MSG ROUTING HEADER SEGMENT (AH).

Explanation: Refer to the description of automatic message sending in the manual. If format code three is used, an operation descriptor (MA segment) in the message leg of the Audit Data Base will have a message number (sixth and final field) of the form:

03rr

where:

0 is a literal,
3 indicates format code three,
and rr is the routing code (01 to 99)

Operator Response: See your systems programmer.

Programmer Response: A message routing header (AH segment) must be created with a key of the format:

ss####rr

where:

ss is the first two characters of the system ID,
is a literal,
and rr is the routing code (01 to 99).

A detail segment (AR) is also required.

ADFD803 DATA BASE ERROR - DL/I STATUS CODE = 'xx' FOR AUTOMATIC MSG HEADER-AH.

Explanation: See message ADFD802.

User Response: See message ADFD802.

ADFD804 'pguserid' KEY NOT FOUND - SERIAL NUMBER SEGMENT (SR). STATUS='xx'

Explanation: The named SR segment was not found.

Operator Response: See your systems programmer.

Programmer Response: Add the SR segment to the data base.

ADFD805 DATA BASE ERROR - SERIAL NUMBER SEGMENT (SR). KEY='pguserid'. STATUS='xx'

Explanation: A data base error was encountered when attempting to retrieve the Serial Number segment.

User Response: Take action appropriate to the DL/I status code.

ADFD806 'pg' KEY NOT FOUND - PROJECT/GROUP SEGMENT (PG). STATUS='xx'

Explanation: The Project/Group segment was not found.

Operator Response: See your systems programmer.

Programmer Response: Add the PG segment to the data base.

ADFD807 DATA BASE ERROR - PROJECT/GROUP SEGMENT (PG). KEY='pg'. STATUS='xx'

Explanation: A data base error was encountered when attempting to retrieve the Project/Group segment.

User Response: Take action appropriate to the DL/I status code.

ADFD808 'xx' KEY NOT FOUND - MESSAGE SEGMENT (MG). STATUS='xx'

Explanation: The named Message segment was not found.

Operator Response: See your systems programmer.

Programmer Response: Add the MG segment to the data base.

ADFD809 DATA BASE ERROR - MESSAGE SEGMENT (MG). KEY='xx'. STATUS='xx'

Explanation: A data base error was encountered when attempting to retrieve the Message Header segment.

User Response: Take action appropriate to the DL/I status code.

ADFD810 AUDITOR COULD NOT FIND AN AUTOMATIC FIELD ASSIGNMENT OPERATION DESCRIPTOR. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.

Explanation: A FIELD statement to the Rules Generator was marked AFA = YES or KAUDIT = P, but no operation descriptor (AA segment) was set up. For other possible causes of this error message refer to the secondary explanations under message ADFD818, reading AA for FA.

User Response: Add an AA segment.

ADFD811 DATA BASE ERROR - AUTOMATIC FIELD ASSIGNMENT SEGMENT (AA). auditgroup KEY='nn'. STATUS='xx'

Explanation: A data base error was encountered when attempting to retrieve the Automatic Field Assignment segment.

User Response: Take action appropriate to the DL/I status code.

ADFD812 AUDITOR COULD NOT FIND A MESSAGE LEG DATA DESCRIPTOR. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.

Explanation: The Auditor is attempting to perform an operation that requires a data descriptor segment (DM). However, no such segment is present beneath the operation descriptor (MA segment) that requires it.

User Response: Create a DM segment with concatenated key of form:

ssssyyyysxxxffffnn0001

where:

ssssyyyysxxxffff is the root segment (GF) key,
nn is the operation descriptor (MA) segment key,
and 0001 is the data descriptor (DM) segment key.

ADFD813 DATA BASE ERROR - MESSAGE DESCRIPTOR SEGMENT (DM). STATUS='xx'

Explanation: A data base error was encountered when attempting to retrieve the message header segment.

User Response: Take action appropriate to the DL/I status code.

ADFD814 AUDITOR COULD NOT FIND A FIELD AUDIT DATA DESCRIPTOR. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.

Explanation: The Auditor is attempting to perform an operation that requires a data descriptor segment (DF). However, no such segment is present beneath the operation descriptor (FA segment) that requires it.

User Response: Create a DF segment with concatenated key of form:

ssssyyyysxxxffffnn0001

where:

ssssyyyysxxxffff is the root segment (GF) key,
nn is the operation descriptor (FA) segment key,
and 0001 is the data descriptor (DF) segment key.

ADFD815 DATA BASE ERROR - FIELD AUDIT DESCRIPTOR SEGMENT (DF). STATUS='xx'

Explanation: A data base error was encountered when attempting to retrieve the Field Audit Descriptor segment.

User Response: Take action appropriate to the DL/I status code.

ADFD816 **AUDITOR COULD NOT FIND AN AUTOMATIC FIELD ASSIGNMENT DATA DESCRIPTOR. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**

Explanation: Refer to message ADFD814 but read DA for DF and AA for FA.

User Response: Same.

ADFD817 **DATA BASE ERROR - AUTOMATIC FIELD ASSIGNMENT DESC. (DA). STATUS='xx'**

Explanation: A data base error was encountered when attempting to retrieve the DA segment.

User Response: Take action appropriate to the DL/I status code.

ADFD818 **AUDITOR COULD NOT FIND A FIELD AUDIT OPERATION DESCRIPTOR. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**

Explanation:

1. A Rules Generator FIELD statement was marked AUDIT = YES and the field was changed or marked as changed (e.g. by FAUDIT = YES); or
2. The FIELD statement was marked PAUDIT = YES but no operation descriptor (FA) segment is present on the Audit Data Base under the appropriate header (GF) segment with the appropriate key; or
3. The field statement was marked KAUDIT = S but no operation descriptor (FA) segment was set up.
4. A next true or next false number in one operation descriptor (FA) segment indicates the key of another FA segment that is not present; or
5. A call operation (code 20) has been used and on return the Auditor cannot find the next sequential operation descriptor (FA) segment which must have a key one greater than that containing the call operation.

Operator Response: See your systems programmer.

Programmer Response: Determine the cause and correct as appropriate.

ADFD819 **DATA BASE ERROR - FIELD AUDIT SEGMENT (FA). STATUS='xx'**

Explanation: A data base error was encountered when attempting to retrieve the Field Audit segment.

User Response: Take action appropriate to the DL/I status code.

ADFD820 **AUDITOR COULD NOT FIND A MESSAGE LEG OPERATION DESCRIPTOR. AUDITED FIELD IS xxxxxxxx. SEQ# = nn.**

Explanation:

1. A Rules Generator FIELD statement was marked MSG = YES and the field was changed or marked as changed (e.g. via FAUDIT = YES); or
2. The field was marked both MSG = YES and PAUDIT = YES but no operation descriptor (MA) segment is present on the Audit Data Base beneath the header (GF) segment with the appropriate key.

For other possible causes of this error message refer to the secondary explanations under message ADFD818, reading MA for FA.

Operator Response: See your systems programmer.

Programmer Response: Determine the cause and correct as appropriate.

- ADFD821 DATA BASE ERROR - MESSAGE SENDING SEGMENT (MA).**
STATUS='xx'
- Explanation:** A data base error was encountered when attempting to retrieve the Message Sending segment.
- User Response:** Take action appropriate to the DL/I status code.
- ADFD822 KEY NOT FOUND - USER MESSAGE SEGMENT (US).**
- Explanation:** See message ADFD802.
- User Response:** See message ADFD802.
- ADFD823 DATA BASE ERROR - USER MESSAGE SEGMENT (US).**
STATUS='xx'
- Explanation:** A data base error was encountered when attempting to retrieve the User Message Segment.
- User Response:** Take action appropriate to the DL/I status code.
- ADFD824 KEY NOT FOUND - SYSTEM MESSAGE SEGMENT (SY).**
- Explanation:** Every message header (HD) segment must have one or two message text (SY) segments beneath it.
- User Response:** Check the HD and SY segments to find those that are missing and add.
- ADFD825 DATA BASE ERROR - SYSTEM MESSAGE SEGMENT (SY).**
STATUS='xx'
- Explanation:** An error was encountered when attempting to retrieve the System Message segment.
- User Response:** Take action appropriate to the DL/I status code.
- ADFD826 KEY NOT FOUND - AUTOMATIC MSG ROUTING SEGMENT (AR).**
- Explanation:** Every automatic message routing header (AH) segment must have at least one detail (AR) segment beneath it.
- User Response:** Determine the missing AR segments and add.
- ADFD827 DATA BASE ERROR - DL/I STATUS CODE = ' ' AUTOMATIC MSG ROUTING SEG AR**
- Explanation:** An error was encountered when attempting to retrieve the Automatic Message Routing segment.
- User Response:** Take action appropriate to the DL/I status code.
- ADFD828 'field-auditgroup' KEY NOT FOUND - AUDIT GROUP SEGMENT (GF).**
STATUS='xx'.
- Explanation:** Status is usually 'GE'. A GF segment could not be found with key equal to the listed field and audit group.
- User Response:** For every Rules Generator FIELD statement with any of the audit operands coded (A STATUS, AUDIT, MSG, AFA, PAUDIT) a root (GF) segment must be created in the Audit Data Base with key of the form:
- ssssyyyyssxxffff
- where:
- ssss is the application system ID,
 yyyy is the audit group code, i.e. the value of the AGROUP operand on the Rules Generator SYSTEM or GENERATE TRXID

statement or the default value YYYY,
ss is the first two characters of the system ID,
xx is the ID of the segment containing the field,
and ffff is the field ID.

ADFD829 DATA BASE ERROR - AUDIT GROUP SEGMENT (GF).
KEY='field-auditgroup'. STATUS='xx'

Explanation: An error was encountered when attempting to retrieve the Audit Group segment.

User Response: Take action appropriate to the DL/I status code.

ADFD830 KEY NOT FOUND - PROFILE SEGMENT (PR).

Explanation: Status is usually 'GE'. A PR segment could not be found.

User Response: Add the necessary PR segment.

ADFD831 DATA BASE ERROR - PROFILE SEGMENT (PR). STATUS='xx'

Explanation: An error was encountered when attempting to retrieve the Profile (PR) segment.

User Response: Take action appropriate to the DL/I status code.

ADFD832 TERMINAL SEGMENT (TR) NOT FOUND. STATUS='xx'.

Explanation: A terminal segment could not be found.

Operator Response: See your systems programmer.

Programmer Response: Add the necessary terminal segment.

ADFD833 DATA BASE ERROR - TERMINAL NUMBER SEGMENT (TR). STATUS='xx'.

Explanation: Terminal segment.

User Response: Take action appropriate to the DL/I status code.

ADFD834 KEY NOT FOUND - SECONDARY TRANSACTION DESTINATION SEGMENT (SD).

Explanation: A secondary transaction destination segment could not be found.

User Response: Add the necessary SD segment.

ADFD835 DATA BASE ERROR - DL/I STATUS CODE = 'xx' SECONDARY TRANSACTION SEG SD

Explanation: An error was encountered when attempting to retrieve the Secondary Transaction destination segment.

User Response: Take action appropriate to the DL/I status code.

ADFD836 KEY NOT FOUND - LOGICAL TERMINAL ROUTING SEGMENT (LT).

Explanation: A logical terminal routing segment could not be found.

User Response: Add the necessary LT segment.

- ADFD837 DATA BASE ERROR - DL/I STATUS CODE = 'xx' LOGICAL TERMINAL ROUTING LT**
- Explanation:** An error was encountered when attempting to retrieve the Secondary Transaction destination segment.
- User Response:** Take action appropriate to the DL/I status code.
- ADFD838 KEY NOT FOUND - USER MESSAGE HEADER SEGMENT (UH).**
- Explanation:** A user message header segment could not be found.
- User Response:** Add the necessary UH segment.
- ADFD839 DATA BASE ERROR - DL/I STATUS CODE = 'xx' USER MESSAGE HEADER SEG (UH)**
- Explanation:** An error was encountered when attempting to retrieve the user message header segment.
- User Response:** Take action appropriate to the DL/I status code.
- ADFD840 KEY NOT FOUND - USER MESSAGE MAILBOX SEGMENT (#U).**
- Explanation:** A user message mailbox segment could not be found.
- User Response:** Add the necessary #U segment.
- ADFD841 DATA BASE ERROR - DL/I STATUS CODE = 'xx' USER MESSAGE MAILBOX SEG #U.**
- Explanation:** An error was encountered when attempting to retrieve the user message mailbox segment.
- User Response:** Take action appropriate to the DL/I status code.
- ADFD842 KEY NOT FOUND - PROJECT/GROUP MAILBOX SEGMENT (#P).**
- Explanation:** A Project/Group mailbox segment could not be found.
- User Response:** Add the necessary #P segment.
- ADFD843 DATA BASE ERROR - DL/I STATUS CODE = 'xx' PROJECT/GROUP MAILBOX SEG #P**
- Explanation:** An error was encountered when attempting to retrieve the project/group mailbox segment.
- User Response:** Take action appropriate to the DL/I status code.
- ADFD844 KEY NOT FOUND - TABLE NAME SEGMENT(TN).**
- Explanation:** Status is usually 'GE'
- A table operation has been requested in an audit operation but the table named in the data descriptor does not exist in the Audit Data Base. A table is identified by a 22-character concatenated key consisting of a 16-character root (GF) segment key followed by a six-character table name (TN) segment key.
- User Response:** Add the necessary TN segment.

ADFD845 DATA BASE ERROR - TABLE NAME SEGMENT(TN). STATUS='xx'
Explanation: An error was encountered when attempting to retrieve the project/group mailbox segment.
User Response: Take action appropriate to the DL/I status code.

ADFD846 KEY NOT FOUND - TABLE ENTRY SEGMENT (TA).
Explanation: A table entry segment could not be found.
User Response: Add the necessary TA segment.

ADFD847 DATA BASE ERROR - TABLE ENTRY SEGMENT (TA). STATUS='xx'
Explanation: An error was encountered when attempting to retrieve the table entry segment.
User Response: Take action appropriate to the DL/I status code.

ADFD848 KEY NOT FOUND - HELP HEADER SEGMENT (HE).
Explanation: A HELP header segment could not be found.
User Response: Add the necessary HE segment.

ADFD849 DATA BASE ERROR - HELP HEADER SEGMENT (HE). STATUS='xx'
Explanation: An error was encountered when attempting to retrieve a HELP header segment.
User Response: Take action appropriate to the DL/I status code.

ADFD850 KEY NOT FOUND - SCREEN HELP TEXT (HT).
Explanation: A screen HELP text segment could not be found.
User Response: Add the necessary HT segment.

ADFD851 DATA BASE ERROR - SCREEN HELP TEXT (HT). STATUS='xx'
Explanation: An error was encountered when attempting to retrieve a screen HELP text segment.
User Response: Take action appropriate to the DL/I status code.

ADFD852 KEY NOT FOUND - MESSAGE HELP TEXT (MH).
Explanation: A message HELP text segment could not be found.
User Response: Add the necessary MH segment.

ADFD853 DATA BASE ERROR - MESSAGE HELP TEXT (MH). STATUS='xx'
Explanation: An error was encountered when attempting to retrieve a message HELP text segment.
User Response: Take action appropriate to the DL/I status code.

ADFE MESSAGES

ADFE001 SEQ2 nnnnnnnn IS NOT FOUND ***

Explanation: A BLOCK DLET has been requested but the second sequence number is not in the data base.

User Response: Verify sequence numbers and retry.

ADFE002 SEQ1 nnnnnnnn IS NOT FOUND ***

Explanation: A BLOCK DLET has been requested but the first sequence number is not in the data base.

User Response: Verify sequence numbers and retry.

ADFE003 DELETE NOT ALLOWED - PARENT RESTRICTED ***

Explanation: The processing option (PROCOPT) in the PSB is set up such that the segment cannot be deleted through the Text Utility Processing function.

User Response: Continue processing. Correct the PSB if appropriate.

ADFE004 INSERT NOT ALLOWED - PARENT RESTRICTED ***

Explanation: The processing option (PROCOPT) in the PSB is set up such that the segment cannot be inserted through the Text Utility Processing function.

User Response: Continue processing. Correct the PSB if appropriate.

ADFE005 UPDATE NOT ALLOWED - PARENT RESTRICTED ***

Explanation: The processing option (PROCOPT) in the PSB is set up such that the segment cannot be updated through the Text Utility Processing function.

User Response: Continue processing. Correct the PSB if appropriate.

ADFE006 DATA BASE ERROR. PLEASE TERMINATE SESSION

Explanation: DL/I error in the data base.

User Response: Call your System Programmer.

ADFE007 NO TEXT SEGMENTS CURRENTLY EXIST

Explanation: The requested segment is not in the data base.

User Response: Add new text segments or request a new key or TRXID.

ADFE008 A LIMIT OF 20 SEQUENCE CONFLICTS HAS BEEN REACHED

Explanation: Self-explanatory.

User Response: Resolve conflicts by deleting duplicate entries.

ADFE009 CHANGES NOT ALLOWED IN RETRIEVE MODE

Explanation: Changes may only be made in update mode (5).

User Response: Change the mode to update (5) if data must be changed.

ADFE010 MODIFICATIONS COMPLETED ***
Explanation: Modifications have been made to the data base as requested.
User Response: Continue Processing.

ADFE011 DELETE COMPLETED ***
Explanation: Response to request to delete segments.
User Response: Continue processing.

ADFE012 POSITION COMPLETED ***
Explanation: The position request has been successfully completed.
User Response: Continue processing.

ADFE013 SEQUENCE CONFLICT RESOLUTION REQUIRED
Explanation: The user has added or modified a key such that a duplicate now exists.
User Response: Delete one of the duplicate occurrences and continue.

ADFE014 PREVIOUS INPUT IGNORED ***
Explanation: Option 'I' was entered.
User Response: Continue processing.

ADFE015 PARENT SEGMENT NOT FOUND
Explanation: The parent segment for the target segment requested does not exist.
User Response: Change parent key and continue.

ADFE016 TEXT UTILITY AVAILABLE IN MODE 5 OR 6 ONLY
Explanation: The user has entered a transaction mode other than 5 (UPDATE) or 6 (RETRIEVE). Modes 5 and 6 are the only allowable transaction modes for Text Utility Processing.
User Response: Enter a valid mode.

ADFE017 FOR ERRORS, =+1 IN ACTION OR PRESS PF1
Explanation: An error was detected by the Data Mapper. Informative logical pages follow.
User Response: The error messages describing the data conversion errors that have taken place can be viewed by pressing the PF1 key. Return to the data display screen by pressing the PF2 or PF3 key or by entering -1 or =1 in the ACTION field.

ADFE018 BAD SEG HANDLER PARM LIST. SEGID=XX
Explanation: The Segment Handler was passed a bad parameter list.
User Response: The list was probably passed from a Special Processing Routine. Check its validity.

ADFE019 * NO MODIFICATIONS MADE TO THE DATA BASE

Explanation: The operator specified update, but did not cause the data base to be updated. The transaction driver has determined that no data base segments should be updated during this screen iteration.

User Response: Contact systems programmer for a definition of application logic.

ADFE020 * DATA MODIFIED SUCCESSFULLY *****

Explanation: Modified segment has been written to the data base. Data updates in transaction mode 5, possibly including insertions and deletions if requested, have been completed.

User Response: Continue processing.

ADFE021 * DATA ADDED SUCCESSFULLY *****

Explanation: A transaction using mode 2 or 4 has completed.

User Response: Continue processing.

ADFE022 * DATA DELETED SUCCESSFULLY *****

Explanation: A transaction using mode 1 or 3 has completed.

User Response: Continue processing.

ADFE023 SPECIAL PROCESSING COMPLETED SUCCESSFULLY

Explanation: The Special Processing routine has returned to the Transaction Driver with a return code of 4, which means that it completed successfully.

User Response: Continue processing.

ADFE024 INVALID OPTION SELECTED

Explanation: Option entered is not on the list of allowable options.

User Response: Enter a valid option.

ADFE025 END OF DATA REACHED BEFORE END OF TRANSACTION. \$\$ MAY BE MISSING ***

Explanation: While attempting to fill out a transaction whose card image record count is greater than 1, (CNT= in Batch Input Transaction Rule), the Batch Driver has encountered end of file on TRANSIN. Either the end of data characters are missing from the last record of the transaction, or the rest of the records have not been included.

User Response: Include either \$\$ or the installation defined end of data characters in the last record of the transaction (if fewer than the number specified in CNT are provided) or include the rest of the records in the transaction.

ADFE026 BLANK MESSAGE WILL NOT BE SENT

Explanation: Message text is blank.

User Response: Enter message text and press enter.

ADFE027 THIS MESSAGE HAS ALREADY BEEN SENT TO THIS USER

Explanation: The previous operation sent the same message to the same user.

User Response: Change USERID or message text and continue.

- ADFE028 BROADCAST COMPLETE. nnn PROJECT USERS INFORMED**
Explanation: The message was sent to the number of Project Users specified.
User Response: Continue processing.
- ADFE029 THIS PROJECT/GROUP OR USER IS UNKNOWN TO SYSTEM**
Explanation: The user attempted to send a message to a project/group or user that does not exist.
User Response: Verify and re-enter the project/group or user.
- ADFE030 MESSAGE(S) HAVE BEEN ACKNOWLEDGED**
Explanation: Specified message(s) has/have been marked acknowledged.
User Response: Continue processing.
- ADFE031 MESSAGE NUMBER NOT FOUND OR INVALID RANGE**
Explanation: The value entered in the number field or range could not be found.
User Response: Enter a valid message number or range.
- ADFE032 DISPLAY ALL MESSAGES**
Explanation: Acknowledges option=D request.
User Response: Continue processing.
- ADFE033 DISPLAY ALL UNACKNOWLEDGED MESSAGES**
Explanation: Acknowledges option=U request.
User Response: Continue processing.
- ADFE034 FORWARD nn MESSAGES**
Explanation: Display of messages is moved forward the number indicated by nn.
User Response: Continue processing.
- ADFE035 FORWARD PASSED END OF MESSAGES**
Explanation: The user requested that the message display be forwarded more messages than were left to be displayed.
User Response: Enter a lower number.
- ADFE036 RESET TO DB MGR MESSAGES**
Explanation: Reset to the messages for the Data Base Administrator.
User Response: Continue processing.
- ADFE037 DISPLAY MESSAGES FOR PROJECT/GROUP xx**
Explanation: Designates that messages for Project/Group xx are being displayed. This is only valid for data base administrator (Group=X) and is specified by entry of OPTION=X.
User Response: Continue processing.

ADFE038 NO MESSAGES FOUND FOR PROJECT/GROUP OR USER X
Explanation: The Project/Group or user specified has no messages on file.
User Response: Continue processing.

ADFE041 MESSAGES FROM INVALID PROJECT/GROUP XX. STATUS= XX
Explanation: Message was received from a Project/Group which is not defined in the Sign-on Profile Data Base.
User Response: Contact the System Programmer.

ADFE044 NO NEW MESSAGES FOUND FOR PROJECT USER
Explanation: This Project/Group or user has no unacknowledged messages on file.
User Response: Continue processing.

ADFE045 MESSAGE NUMBER TEXT NOT FOUND - SY SEGMENT
Explanation: Refer to message ADFD824.
User Response: Same.

ADFE046 MESSAGE NUMBER NOT IN DATA BASE - HD SEGMENT
Explanation: Refer to message ADFD800.
User Response: Same.

ADFE047 MESSAGE SENT:
Explanation: Acknowledges that the message has been sent to the specified user.
User Response: Continue processing.

ADFE048 USER DOES NOT EXIST IN THE SYSTEM
Explanation: An attempt to send a message to a user failed because the user could not be found in the Sign-on Profile Data Base.
User Response:
 1. Verify that the user ID was entered correctly.
 2. Add an 'SR' segment to the Sign-on Profile Data Base for this user.

ADFE049 DISPLAY FROM THE TOP
Explanation: Request to show messages again beginning from the start of the list.
User Response: Continue processing.

ADFF050 INVALID TRANSACTION SELECTION
Explanation: A Transaction ID was selected to which the user does not have access.
 The user may only select from the list of two character transaction IDs displayed on the menu. The choice is entered in the SELECT field. To change the transaction mode, enter SELECT: C. New transaction IDs must be included in the security profiles and in the secondary option menu rule (GENERATE OPTION=SOM).

ADFE051 NEW TRANSACTION ENCOUNTERED BEFORE END OF PREVIOUS TRANSACTION. \$\$ MAY BE MISSING ***

Explanation: While attempting to fill out a transaction whose card image record count is greater than 1 (CNT= in Batch Driver Rule), the Batch Driver has encountered a new transaction. Either the end of data characters are missing from the last record of the previous transaction, or the rest of the records have been dropped.

Warning: Only transactions starting with the same Major System ID will be caught. If a transaction in this situation starts with a different Major System ID (which is in itself an error) it will not be caught and will be included as part of the transaction, causing unknown results.

User Response: Include either \$\$ or the installation defined end of data characters on the last record of the previous transaction (if fewer than the number specified in CNT are provided) or include the rest of the records in the transaction.

ADFE052 NO VALID SELECTIONS FOR TRXCODE n

Explanation: The user is not authorized to access any transaction IDs at the level specified by TRXCODE.

The user must enter SELECT: C to return to the primary option menu and use a different transaction mode. New transaction IDs must be included in the security profiles and in the secondary option menu rule (GENERATE OPTION=SOM).

User Response: Enter a valid level.

ADFE053 INVALID OPTION xxxxxx ENTERED

Explanation: This message is issued by the Message Maintenance transaction MM. The option noted was not recognized.

User Response: Enter a valid option. See the IMS Application Development Facility II Version 2 Release 2 Application Development Guide for a list of valid options.

ADFE054 THIS MESSAGE DELETED

Explanation: This Project/Group or user message has been deleted from the Sign-on Profile or Message Data Base by the Message Maintenance transaction (MM) from the Sign-on Profile or Message Data Base since it has been acknowledged.

User Response: None.

ADFE056 SEG HANDLER NOT FOUND. SEGMENT ID=xx

Explanation: The Segment Handler Rule for the designated segment cannot be loaded.

User Response: Call system programmer. Rule has not been generated.

ADFE057 TABLE LOAD ERROR. IMS TRANS=xxxxxxxx

Explanation: Refer to message ADFD501.

User Response: Same.

ADFE058 SPA FULL TRYING TO LOAD - SEGMENT ID=xx

Explanation: Refer to message ADFD504.

User Response: Same.

ADFE059 NO FIELDS ERROR FOR SEGMENT XX

Explanation: A loadable (DBPATH) segment has been generated with no key fields.

User Response: Call system programmer. Rules Generator source is in error.

ADFE060 OPERATOR REQUESTED SOFT STOP. REMAINING TRANSIN DATA WRITTEN TO TRANSOUT. RUN TERMINATED ***

Explanation: The operator keyed 'STOP' to stop the run. Any remaining data in the TRANSIN data set is written to the TRANSOUT data set and may be used later as input.

User Response: None, except continue the run later.

ADFE061 OPEN FAILED FOR xxxxxxxx. BATCH DRIVER TERMINATING ***

Explanation: The data set specified (TRANSIN, TRANSOUT, ERRMSG, ERRTRX, or RSTRTIN) could not be opened. Probable JCL error. The run is terminated.

User Response: Correct the JCL and resubmit.

ADFE062 CARD COUNT SPECIFIED IN ITR. VALID ONLY FOR CARD IMAGE RECORDS (FIXED LENGTH, 80 CHAR) ***

Explanation: COUNT=nn was specified for this segment in the Input Transaction Rule, but the TRANSIN data set was created with fixed length records longer than 80 characters or with variable length records.

User Response: Either remove COUNT from the rules generation or correct the record format and/or size.

ADFE063 RECORD LENGTH IS TOO LARGE. MAXIMUM RECORD LENGTH IS 255 CHARACTERS ***

Explanation: The record length of the TRANSIN data set is greater than 255 characters. Records cannot be processed as expected, so the run is terminated.

User Response: Reduce the record length of the input to less than 255 characters.

ADFE064 * END OF DATA FOR TRXID XX *****

Explanation: The N (next) option has been used and the last segment has been found. The N option applies to the first target segment of the transaction. For a root segment it can reach the end of the data base; for a dependent segment it stops at the last segment of that type below its parent.

User Response: Continue processing.

ADFE065 TRX ABORTED - INVALID ITR OR SEG RULE DEFINITION

Explanation: Check the specification of the Input Transaction or Segment Layout Rule.

User Response: Correct the rule.

ADFE066 * DATA COMPARE FAILED. RESTART TRANSACTION *****

Explanation: Transaction data was changed by another user between the time it was displayed and the time an update was attempted.

User Response: Re-enter your data.

- ADFE067 TRANSACTION INPUT MESSAGE DOES NOT BEGIN WITH ssss *****
Explanation: First record in a transaction must begin with the major system id listed (sss).
User Response: Correct the input and re-submit.
- ADFE068 INVALID TRANSACTION MODE (n) SPECIFIED. MODE MUST BE 1 TO 6 *****
Explanation: The transaction mode is not in the range of 1 to 6.
User Response: Enter a valid mode (1-6).
- ADFE069 ENTER DATA FOR UPDATE**
Explanation: The screen is available to the user to modify fields in the update or add modes.
User Response: Enter data as required for update or add.
- ADFE070 FLUSHING TO NEXT VALID TRANSACTION NAME *****
Explanation: This message occurs for successive input records of a transaction when the first (or preceding) record of that transaction are in error.
User Response: Correct the error encountered and rerun.
- ADFE071 INPUT TRANSACTION RULE xxxxxxxx NOT FOUND *****
Explanation: The Input Transaction Rule named was specified in the Batch Driver Rule but could not be found in the library.
User Response: Generate the named rule.
- ADFE072 PRESS ENTER TO DELETE DATA**
Explanation: A delete mode (1 or 3) has been specified and the user is viewing the data to be deleted.
User Response: Press the ENTER key if you wish the data to be deleted, otherwise change the key or TRXID to request another screen.
- ADFE073 INVALID RETURN CODE nn FROM SPECIAL PROCESSING *****
Explanation: The Special Processing Routine returned a completion code other than 0, 2, 3, 4, 8, 12, 28.
User Response: Correct the Special Processing Routine so that it returns an expected return code value.
- ADFE074 SPECIAL PROCESSING ROUTINE OR SEGMENT HANDLER RULE NOT FOUND *****
Explanation: A Special Processing Routine or Segment Handler Rule that was in the Batch Driver Rule was not found in the library.
User Response: Add the Segment Handler Rule or Special Processing Routine to the library.
- ADFE075 NO MSG GENERATED ON BAD RETURN CODE FROM AUDITOR *****
Explanation: Error return code from Auditor, but no message was generated.
User Response: Determine cause of error and correct.

ADFE076 END OF INPUT ***

Explanation: End of TRANSIN data set reached. Processing terminates normally.

User Response: None.

ADFE077 SIGNON=YES NOT SPECIFIED IN BATCH DRIVER RULE. SIGNON XACT IGNORED ***

Explanation: A SIGNON transaction was found in the TRANSIN data set, but the Batch Driver Rule did not require sign-on (SIGNON=N). Sign-on processing is not performed.

User Response: Remove the SIGNON transaction from the input or change the Batch Driver Rule to require sign-on.

ADFE078 SIGNON NOT REQUIRED AND USER NOT SIGNED ON. SIGNOFF TRANSACTION IGNORED ***

Explanation: A SIGNOFF transaction was found in the TRANSIN data set, but the Batch Driver Rule did not require sign-on (SIGNON=N). Sign-on processing is not performed.

User Response: Remove the SIGNOFF transaction from the input or change the Batch Driver Rule to require sign-on processing.

ADFE079 SIGNON TRANSACTION REQUIRED - SKIPPING TO NEXT TRANSACTION ***

Explanation: A data base transaction was encountered before a user signed on and the Batch Driver Rule required sign-on (SIGNON=Y). The transaction is skipped.

User Response: Include a SIGNON transaction in the input.

ADFE080 SIGNON SUCCESSFULLY COMPLETED. CONTINUING WITH NEXT TRANSACTION ***

Explanation: User has successfully signed on.

User Response: None.

ADFE081 NON-DB TRANSACTION NOT ALLOWED DURING PROCESSING OF A DB TRANSACTION ***

Explanation: A SIGNON, SIGNOFF, or CHKPT transaction was encountered within a data base transaction. The Input Transaction Rule specified COUNT greater than 1.

User Response: Check to see if a transaction delimiter (\$\$) is missing.

ADFE082 PROCESSING MODE CONFLICT WITH USER PROFILE ***

Explanation: A transaction ID was selected to which the user does not have access.

User Response: Use a valid ID or mode.

ADFE083 TRANSACTION MODE CONFLICT WITH USER PROFILE ***

Explanation: The user is not authorized to access the selected segment at the level specified in transaction mode.

User Response: Correct the mode.

ADFE084 USER NOT AUTHORIZED TO ACCESS xx SEGMENT ***

Explanation: The user is not authorized to access the selected segment.

User Response: Enter a valid segment ID.

ADFE085 FLUSHING TO NEXT SIGNON TRANSACTION ***

Explanation: Sign-on was attempted but was unsuccessful. All data base transactions are skipped until a valid SIGNON transaction is processed.

User Response: Correct the SIGNON transaction as indicated in its error message.

ADFE086 CHKPT=YES NOT SPECIFIED IN BATCH DRIVER RULE. CHKPT REQUEST IGNORED ***

Explanation: CHKPT transaction was found in input but CHKPT=NO was specified in Batch Driver Rule. No checkpoint was taken.

User Response: Add CHKPT=Y to the Batch Driver Rule if checkpointing is desired, or remove the CHKPT transaction from the input.

ADFE087 CHECKPOINT nnnnnnnnn TAKEN AT INPUT RECORD NUMBER nnnnnn, TRANSACTION NUMBER nnnnn ***

Explanation: Indicates that a checkpoint was taken.

User Response: None.

ADFE088 CHECKPOINT/FREEZE IN PROCESS. NO MORE IMS/VS CALLS ALLOWED ***

Explanation: A checkpoint was attempted by the Batch Driver after the operator had issued a CHECKPOINT/FREEZE. All remaining TRANSIN records are written to the TRANSOUT data set and the run is terminated.

User Response: None.

ADFE090 UNEXPECTED DL/I STATUS CODE (xx) RETURNED FROM CHECKPOINT. RUN TERMINATED ***

Explanation: Unexpected error was returned from the Checkpoint routine. All remaining TRANSIN data is written to the TRANSOUT data set.

User Response: Determine the cause of the error and correct it. Resubmit the job using the TRANSOUT data set as TRANSIN.

ADFE091 RESTART PROCESSING HAS BEEN SUCCESSFULLY COMPLETED ***

Explanation: This run has been successfully restarted.

User Response: None - processing continues.

ADFE092 ERROR OCCURRED DURING RESTART PROCESSING - TRX COUNTS DO NOT MATCH ***

Explanation: The record contents of the TRANSIN data sets at checkpoint and restart are different. The files are out of sync.

User Response: Correct the input.

ADFE093 ERROR OCCURRED DURING RESTART PROCESSING - TRX LENGTHS DO NOT MATCH ***

Explanation: The length of the transaction at restart time is different from the length of the transaction in effect at checkpoint time. The TRANSIN data sets do not match.

User Response: Correct the input.

ADFE094 ERROR OCCURRED DURING RESTART PROCESSING - TRANSACTIONS DO NOT MATCH ***

Explanation: The transaction at restart in the transaction input is different from the transaction in effect at checkpoint time. The TRANSIN files should match.

User Response: Correct the input.

ADFE095 CURRENT SYSID DOES NOT MATCH SYSID FROM XRST. CHECK BATCH DRIVER RULE ***

Explanation: The application system ID portion of the Batch Driver Rule name being used on restart is different from the Batch Driver Rule name in effect when the checkpoint was taken.

User Response: Correct the Batch Driver Rule name in the EXEC card in the JCL.

ADFE096 TRANSACTION NUMBER nnnnn BYPASSED AS REQUESTED ***

Explanation: This transaction has been bypassed during Restart processing as requested on the RSTRTIN control card.

User Response: None.

ADFE098 IO ERROR ON RULE LIBRARY DIRECTORY - CANNOT LOAD RULES ***

Explanation: Permanent I/O error detected when the system attempted to search the Rule Library directory.

User Response: Call your Systems Programmer.

ADFE099 RULE LIBRARY NOT OPEN - CANNOT LOAD RULES ***

Explanation: System error.

User Response: Determine the cause of the error and correct.

ADFE100 THE FOLLOWING RULES ARE NOT IN THE RULE LIBRARY: xxxxxxxx ***

Explanation: The rules listed could not be found during preload processing. Up to 7 rules may be listed.

User Response: Verify that the Input Transaction and Segment Layout rules listed in the Batch Driver rule have in fact been generated and exist in the Rules library.

ADFE101 * INVALID PROJECT OR GROUP *****

Explanation: The user has entered a project/group code for which no PG (Project/Group) segment in the Sign-on Profile Data Base can be found with this code as its key value.

User Response: Verify the Project/Group code and re-enter.

ADFE102 * INVALID USERID *****

Explanation: When attempting to switch to a new project/group, the user has entered a valid project/group code identifying a Project/Group (PG) segment in the Sign-on Profile Data Base but there is no SR segment beneath it with key equal to the user ID entered.

User Response: Enter a valid Project/Group.

- ADFE103 *** INVALID USER PROFILE *****
- Explanation:** Valid PG and SR segments have been found on the Sign-on Profile Data Base for the project/group and user ID entered. However, a valid PR segment cannot be found. A PR segment must be present beneath PG with key equal to the profile id in the SR segment.
- User Response:** Verify the profile segment keys in the Sign-on Profile Data Base. Add a profile segment if necessary.
- ADFE104 PROJECT/GROUP INCONSISTENT WITH MAJOR APPLICATION SYSTEM ID**
- Explanation:** System ID in Batch Driver Rule does not equal system ID in Project/Group segment.
- User Response:** Correct whichever is invalid.
- ADFE106 CANNOT ADD SEGMENT - DATA ALREADY EXISTS**
- Explanation:** In a single path transaction, the user is employing mode 4 (add) or 2 (initiate) but a target segment already exists with the quoted key value.
- In a multi-path transaction in mode 4 or 2 all of the target segment already exist with the quoted keys. The user must enter the key of at least one target segment that does not exist.
- User Response:** Verify the key. If it is correct, determine if you want to change the mode to update (5).
- ADFE107 KEY FIELD xxxxxxxx NOT IN SEG LAYOUT RULE**
- Explanation:** A key field is specified in the Input Transaction Rule but cannot be found in the corresponding Segment Layout Rule.
- User Response:** Add the field to the Segment Layout Rule and re-generate it.
- ADFE108 DATA CONVERSION ERR FOR KEY FIELD xxxxxxxx**
- Explanation:** Data entered for a key field cannot be converted to its specified data type.
- User Response:** Correct the FIELD definitions and re-generate the Segment Layout Rule.
- ADFE109 REQUESTED DATA NOT FOUND FOR GIVEN KEYS**
- Explanation:** The user may have entered the keys of several segments but one or more of them cannot be found on the data base. The message can appear in any transaction mode (1 to 6). It cannot apply, however to a segment eligible for insertion. Segments become eligible either by being target segments when modes 2 or 4 are used or through the ISRT operand of the Rules Generator GENERATE TRXID statement.
- User Response:** Enter a valid key or change the processing mode to Add (4).
- ADFE110 NO ACTION. PROCESSING ERR. DLI STATUS=xx**
- Explanation:** A non-blank DL/I status other than 'GE' or 'GB' has been received.
- User Response:** See your systems programmer.

- ADFE111 CANNOT FIND KEYBLD FIELD FOR KEY xxxxxxxx.**
- Explanation:** A key is specified to be built from a segment previously loaded but the key field cannot be found in the Segment Layout Rules.
- User Response:** Refer to message ADFD516.
- ADFE112 INPUT TRANSACTION RULE CONTAINS MORE THAN nnn SEGS**
- Explanation:** Too many segments in the Input Transaction Rule.
- User Response:** The Input Transaction Rule must be regenerated to stay within the limit of 100.
- ADFE114 RETURN CODE 5 AND SPACGTRX NOT MODIFIED *****
- Explanation:** A Special Processing program has set return code 5 requesting switch to a new transaction ID. The program must set the SPACGTRX to a value different from the current transaction ID.
- User Response:** See explanation.
- ADFE115 *** 'N' OPTION INVALID FOR TRANSACTION *****
- Explanation:** The 'N' option cannot be used in transaction modes 2 and 4.
- User Response:** Enter a specific key value.
- ADFE116 *** ENTER 'E' TO DISPLAY ERROR OR WARNING MESSAGES *****
- Explanation:** One or more errors were encountered during Auditing. Fields in error are highlighted.
- User Response:** Enter 'E' to view the messages.
- ADFE117 REQUESTED DATA NOT FOUND FOR REQUESTED KEYS**
- Explanation:** The user may have entered the keys of several segments but one or more of them cannot be found on the data base. The message can appear in any transaction mode (1 to 6). It cannot apply, however, to segment eligible for insertion. Segments become eligible either by being target segments when modes 2 or 4 are used or through the ISRT operand of the Rules Generator GENERATE TRXID statement.
- User Response:** Enter a valid key or change the processing mode to Add (4).
- ADFE118 SECONDARY OPT MENU RULE xxxxxxxx NOT FOUND**
- Explanation:** The named rule was not found in the Rules Library.
- User Response:** Call your system programmer. SOM= must be specified in the Rules Generator source.
- ADFE119 *** DATA NOT UPDATED AS REQUESTED. PLEASE CONTINUE *****
- Explanation:** One or more warnings were encountered during auditing. In order for updating to proceed enter a 'U' on the Error screen.
- User Response:** To continue with this transaction either enter 'U' on the Error screen or modify the data on the Segment Display screen that have been flagged with warnings.

ADFE120 DATA TYPE UNSUPPORTED FOR KEY. REGEN RULES

Explanation: A data type of BIT has been specified for a key field. This data type is not allowed for keys.

User Response: Change the rules as necessary.

ADFE121 NON-ALPHA DATA ENTERED FOR AN ALPHA KEY

Explanation: A key has been defined as ALPHA, but non-alphabetic characters have been entered for the key.

User Response: Enter alphabetic characters (A-Z) in the key field.

ADFE122 NON-NUMERIC DATA ENTERED FOR A NUMERIC KEY

Explanation: A key has been defined as numeric, but alphabetic characters have been entered for the key.

User Response: Enter numeric characters (0-9) in the key field.

ADFE123 ** KEY DATA REQUIRED. ENTER KEY VALUE **

Explanation: An INITIATE or ADD mode has been specified and the value specified for the key is not initialized (zero or blank). Un-initialized values are not valid for the keys of segments.

User Response: The user is required to enter a non-blank key value for one or more key fields because REQUIRED = YES has been coded on the corresponding Rules Generator FIELD statements.

ADFE124 ** CANNOT PROCESS > FOR THIS KEY FIELD **

Explanation: A '>' was entered in a key field that has a data TYPE=DATE, or for a key that is using a COFIELD as the alternate display and input. Partial key search is not allowed.

User Response: Enter the part of the key that you know or the entire key.

ADFE125 ENTER VALID KEY FOR SEG xx. NO BROWSING

Explanation: No secondary key selection is allowed for this segment. The SKSEGS operand of the Rules Generator SEGMENT statement controls secondary key selection. SKEGS=0 (which is the default for root segments) implies no secondary key selection.

User Response: Enter the full key for the segment denoted by xx.

ADFE126 NO OCCURRENCES FOR SEG xx.

Explanation: There are no occurrences for this segment and a '>' was entered, the transaction mode is RETRIEVE, or the segment does not have insert eligibility.

User Response: Verify the key.

ADFE127 DATA BASE ERROR. RETRY KEY SELECTION

Explanation: I/O error was encountered by the segment handler.

User Response: Notify your systems programmer and continue with next selection.

ADFE128 LIMIT OF 999 SEGMENTS HAS BEEN REACHED

Explanation: There are more than 999 segments that are eligible for display on the Secondary Key Selection screen.

User Response: To see the additional segments, alter the concatenated key in the KEY: field near the top of the screen to reflect the concatenated key of the last segment displayed. Do one of the following:

1. Place a greater than (>) sign as the last character of the key in order to perform a generic key retrieval starting from this position in the data base. This will start the process with another 999 occurrences.
2. Start the display at occurrence 999.

ADFE129 DATA CONVERSION ERR. FIELD NAME= XXXXXXXX

Explanation: A data conversion error has occurred when attempting to display this segment's key or related data on the Secondary Key Selection screen.

User Response: The data base segment should be checked to determine a match between the rule specifications and the actual data.

ADFE130 PRESS ENTER TO VIEW ADDITIONAL SELECTIONS

Explanation: There are more segment occurrences to be displayed.

User Response: Press the ENTER key or enter a selection number.

ADFE131 ENTER OPTION:R TO RETURN TO THE FIRST SCREEN

Explanation: The last Secondary Key Selection screen is being displayed. Option R returns the user to the first screen.

If the segments on the secondary key selection screen are root segments, the last on the screen is the last on the data base. If they are not roots, the last on the screen is the last occurrence of that segment type beneath its parent.

User Response: Enter option 'R'.

ADFE132 INVALID OPTION. ENTER F OR R

Explanation: The only options allowed on this screen are 'F' and 'R'.

User Response: Enter 'F' or 'R' in the option field.

OPTION: F means forward.

OPTION: R means return to the first page.

ADFE133 INVALID SELECTION NUMBER

Explanation: User specified an invalid selection number on a Secondary Key Selection screen.

User Response: The user may only select one of the numbers displayed at the beginning of each line on this Secondary Key Selection screen. To select a different number, first use the OPTION field (F-forward, R-return to first page) to locate the desired occurrence.

User Response: Verify the transaction ID and make another selection.

- ADFE134 SIGN-ON SCREEN, PROJECT GROUP INCONSISTENT**
- Explanation:** The user has entered a project/group code that is the key of a PG segment on the Sign-on Profile Data Base. However, the application system id defined in that PG segment does not match the application system id named in the IMS/VS /FORMAT command.
- User Response:** Verify the Project/Group code and re-enter.
- ADFE146 END OF DATA ON TRANSIN REACHED BEFORE RESTART COMPLETED *****
- Explanation:** All the records on TRANSIN were read before the record number recorded in the checkpoint record.
- User Response:** Verify that the TRANSIN file used on restart is the same as the one used in the checkpointed run. Correct as necessary.
- ADFE148 I/O ERROR READING SOM RULE (xxxxxxx)**
- Explanation:** I/O error in reading the rules load library.
- User Response:** Call your systems programmer.
- ADFE169 SECURITY VIOLATION. TRANCODE=xxxxxxx**
- Explanation:** Attempt to use a function (e.g. Project Message Display) that is not authorized on this terminal.
- User Response:** Contact your system programmer.
- ADFE170 INVALID TRANSACTION MODE**
- Explanation:** Transaction mode not in the range of 1 to 6.
- User Response:** Enter a valid transaction mode.
- ADFE171 PRIMARY OPTN MENU RULE xxxxxxx NOT FOUND**
- Explanation:** Rule specified by xxxxxxx does not exist. There must be one primary option menu rule per application system. It is generated by the Rules Generator through the POMENU operand of the SYSTEM statement or the OPTION=POM operand of the GENERATE statement.
- User Response:** Contact your system programmer.
- ADFE172 I/O ERR READING PRIMARY MENU RULE xxxxxxx**
- Explanation:** I/O error in reading the rules load library.
- User Response:** Call your systems programmer.
- ADFE174 FOR ERRORS, =+1 IN ACTION OR PRESS PF1**
- Explanation:** One or more error conditions were found by the Auditor. Messages appear on following logical pages.
- User Response:** To view the error messages, press PF1 or enter +1 in the ACTION field. To return to the data screen press PF2 or PF3 or enter -1 or =1 in the ACTION field.
- ADFE175 INVALID ITR AND/OR SEGMENT LAYOUT RULE. TRX FLUSHED**
- Explanation:** The Input Transaction or Segment Layout rule is incorrect or the two do not match.
- User Response:** Correct the rule that is in error and re-generate, or re-generate both the Input Transaction Rule and the Segment Layout Rule.

ADFE176 AUDIT ERROR. NO FIELD MARKED IN ERROR.

Explanation: An inconsistency has been found in the static rules, e.g. a new field was added but the Segment Layout Rule was not updated.

User Response: Re-generate the rules through the Rules Generator.

ADFE177 TO VIEW MSGS, =+1 IN ACTION OR PRESS PF1

Explanation: The data base has been updated, but warning messages are displayed as additional logical pages.

User Response: The warning messages can be viewed by pressing the PF1 key. To return to the data display screen, press the PF2 or PF3 key or enter =1 in the OPTION field.

ADFE179 MESSAGE HAS ALREADY BEEN SENT

Explanation: A second request has been made to send a message. The same message will not be sent twice.

User Response: Change the USERID or message text and resend.

ADFE187 MSG(S) HAVE BEEN RESET TO UNACKNOWLEDGED

Explanation: Notification that messages have been set to 'unacknowledged' as requested.

User Response: Continue processing.

ADFE188 ** ENTER THE FOLLOWING KEY INFORMATION **

Explanation: Requests the terminal operator to enter key information in order to view the data.

User Response: Enter the key information as requested.

ADFE189 * ENTER 'E' TO DISPLAY ERROR MESSAGES *

Explanation: An error was encountered during the Key Audit process.

User Response: Enter 'E' to view the message(s). The user may either correct the errors on the display screen at once or enter OPTION: E.

ADFE190 COFIELD FOR KEY xxxxxxxx CANNOT BE LOCATED

Explanation: A field specified as a COFIELD in the Input Transaction Rule cannot be found in a Segment Layout Rule currently loaded.

User Response: Rerun the Rules Generator to ensure the Input Transaction Rule and Segment Layout Rule both reflect the field designated as COFIELD.

ADFE191 * NO MODIFICATIONS MADE TO SCREEN *****

Explanation: The operator pressed enter for an UPDATE screen without making any modifications.

User Response: Operator should change the data fields or request a change of key or TRXID.

ADFE192 * ENTER DATA FOR ADD *****

Explanation: The screen is available to the user to enter data in the add mode.

User Response: Enter data as required for add.

ADFE193 KEY DATA CHANGED - REVERIFY KEYS ***

Explanation: The selection made on the Secondary Key Selection screen has been deleted from the data base by another user since the screen was first displayed. The selected segment has been specified with audit during secondary key selection.

User Response: Enter a different key or request secondary key selection for another set of choices.

ADFE196 INPUT TRANSACTION RULE (xxxxxxx) WAS GENERATED PRIOR TO IMSADF 1.3. REGENERATE THE RULE.

Explanation: The Input Transaction Rule named was generated prior to IMSADF 1.3. It will not be used properly.

User Response: Follow the instructions in the message.

ADFE197 MODE 6 NOT SUPPORTED BY BATCH DRIVER FOR STANDARD PROCESSING ***

Explanation: Retrieve mode (6) was specified for a Standard Processing transaction. It is only allowed for Special Processing.

User Response: Change the mode to 1-5 or create a Special Processing transaction.

ADFE200 SIGNOFF SUCCESSFULLY COMPLETED. CONTINUING WITH NEXT TRANSACTION ***

Explanation: User has successfully signed off.

User Response: None.

ADFE201 * ENTER A SELECTION NUMBER FROM THIS SCREEN *****

Explanation: The Secondary Key Selection screen is displayed with a list of selections. The above message is a prompt message.

User Response: Enter the selection number of an entry on the screen.

ADFE209 SOM RULE INVALID - NOT STD, SPEC, OR TEXT

Explanation: The one byte field in Secondary Option Menu Rule following each transaction ID is not a valid type for the IMSADF II translator selected: standard (1), text (2), special (3). It usually means your SOM has not been regenerated from a prior release.

User Response: Regenerate your entire Secondary Option Menu rule, not necessarily this one transaction.

ADFE210 ENTRY ALREADY IN SEQ CONFLICT TABLE, NOT ENTERED

Explanation: The user entered a duplicate key value that already exists in the data base and in the sequence conflict table. The text utility provides only one level of protection.

User Response: Decide what data you want on that key, use PDS to locate it, and put the data there.

ADFE211 UNEXPECTED MFS INPT OPT, PRIOR SCREEN REDISPLAYED

Explanation: Terminal Operator action caused unexpected input to the text utility. The previously displayed data is shown again.

User Response: Continue processing.

**ADFE215 RULE NAMED xxxxxxxx CANNOT BE FOUND IN COMPOSITE LOAD MODULE
OR IN PRELOAD RULE**

Explanation: The system was installed with 'COMPMOD=YES', which requires that all static rules be included in a Composite Load Module or preloaded through the Preload rule.

User Response: Contact your application programmer.

ADFE216 INSUFFICIENT STORAGE FOR REQUESTED BLDL TABLES

Explanation: Storage is not available to maintain the number of BLDL entries requested at installation with the 'RULESBL' statement. Either additional storage must be allocated to the message region, or the number of BLDL entries must be decreased.

User Response: Contact your systems programmer.

**ADFE217 MSG CONTROL STATEMENT INVALID. FORMAT IS MSG=N OR MSG=(N,N)
WHERE N IS 0,1, OR 2.*****

Explanation: The MSG=(n,m) control statement allows only a 0, 1, or 2 for the n and m parameters.

- 0 = no special message formatting
- 1 = map keys into 'NOT FOUND' messages
- 2 = map field names and values into error or warning messages flagged by auditing or mapping.

User Response: Correct the MSG input statement.

ADFE219 OPTION M OR R IS NOT PERMITTED

Explanation: Twins have not been defined for this transaction so options M or R are invalid.

User Response: Continue processing.

ADFE220 ENTER AMENDMENTS OR OPTION 'M' TO SEE MORE DATA

Explanation: Additional twin occurrences exist. Current displayed occurrences may be modified or the following occurrences may be displayed by entering an option 'M'.

User Response: Continue processing.

ADFE221 INSTALL COMMLN TOO BIG FOR SPA - PROCESSING STOPPED

Explanation: The defined communication area is too large to fit into the current SPA or SPA work database path. The transaction must be redefined.

User Response: Contact your system programmer.

ADFE222 X OPTION INVALID. KEY IS NON-DISPLAYABLE.

Explanation: An attempt was made to back up to a segment which was defined with non-displayable keys. This is not allowed under option 'X'.

User Response: Continue processing.

ADFE223 N OPTION NOT ALLOWED WHEN RETRIEVING RELATIONAL DATA

Explanation: The 'N' option is not supported when accessing DB2 rows.

User Response: Continue processing.

ADFE224 INVALID DATA WAS ENTERED FOR A DBCS/MIXED KEY

Explanation: Invalid data was encountered in the DBCS or MIXED key field of the concatenated key.

User Response: Check each DBCS/MIXED key field of the concatenated key field

- if the length of the key field is correct
- if the DBCS key field is appended by S0/SI
- if the DBCS data in the MIXED field has S0/SI

ADFE225 NO ACTION - PROCESSING ERROR (DB2 STATUS=xx)

Explanation: Due to a critical DB2 status code during an I/O operation, processing for this transaction was terminated.

User Response: Contact your systems programmer.

ADFE226 INVALID FUNCTION ISSUED ON A DB2 DB CALL

Explanation: The function passed to the Table Handler Rule had not been included in the rule during generation. This could be caused by either an incorrect rules generation or an incorrect function name being passed from an audit or user exit routine.

User Response: Contact your application programmer.

ADFE227 USER PL/I PROGRAM FAILED. PROGRAM TYPE IS nnnnnnnn

Module: MFC1V21

Explanation: A user written PL/I routine probably returned via a 'STOP' or 'EXIT' instead of a 'RETURN'. The name of the PL/I routine in error can be determined from the table below.

PROGRAM TYPE	ROUTINE
SIGN ON	MFC1E01
SIGN OFF	MFC1E99
SPR ON/LINE	MFC1EXX
SPR BATCH	MFC1E09
AUDIT EXIT	MFC1E14
DL/I EXIT	MFC1E9X

User Response: Contact your PL/I application programmer.

ADFE228 INVALID TRANSACTION MODE FOR ESDS FILE.

Module: MFC1C09V

Explanation: The only valid transaction mode for VSAM Entry Sequenced Data Sets (ESDS) is 4 - Add. An ESDS is supported only for output.

User Response: Correct the transaction mode and rerun the Rules Generator.

ADFE229 UNABLE TO LOAD MINI-DRIVER nnnnnnnn (PPT)

Module: MFC1C30

Explanation: A PGMIDERR return code was returned in response to an EXEC CICS LOAD of IMSADF II transaction driver load module nnnnnnnn. It is likely that a DFHPPT table entry has not been created for this member.

User Response: See that this member is included in the DFHRPL library and that a DFHPPT table entry is included for this member.

ADFE230 RC xx ATTEMPTING TO SCHEDULE PSB nnnnnnnn

Module: MFC1C30

Explanation: A return code of xx was returned in response to a CICS/VS/OS call to schedule PSB nnnnnnnn. It is likely that a DFHPSB table entry has not been created for this member.

User Response: See that the appropriate member is included in the IMSACB library and that a DFHPSB table entry is included for this member.

ADFE231 UNEXPECTED START CODE - aa

Module: MFC1C30

Explanation: Start code aa was returned in response to the command:

EXEC CICS ASSIGN STARTCODE(codeaddr)

Valid codes are:

TD - started from terminal input

QD - started from a Transient Data queue

User Response: This is likely an IMSADF II internal error. Contact your IMSADF II support personnel.

ADFE232

Module: MFC1C30

MAPSET nnnnnnnn COULD NOT BE LOADED (PPT)

Explanation: A PGMIDERR return code was returned in response to an EXEC CICS LOAD of mapset nnnnnnnn. It is likely that a DFHPPT table entry has not been created for this member.

User Response: See that this member is included in the DFHRPL library and that a DFHPPT table entry is included for this member.

ADFE233 MAPSET nnnnnnnn DOES NOT CONTAIN MAP mmmmmmm

Module: MFC1C30

Explanation: Self explanatory.

User Response: None.

ADFE234

Module: MFC1C28

PAGE REQUESTED NOT IN CURRENT MESSAGE

Explanation: A terminal operator request was made for a page less than the first or greater than the last. The page request is ignored.

User Response: Refer to "Operator Logical Paging" on page 1-28 for the format of page request entries.

ADFE235 INPUT MUST BEGIN ON FIRST PHYSICAL PAGE

Module: MFC1C28

Explanation: Input data was entered beginning with a physical page other than the first of multiple physical page input. An input message is not created.

User Response: Refer to "Handling Multiple Data Display Screens" on page 1-32 for multiple physical page input procedures.

ADFE236 SCREEN REFORMATTED - CLEAR KEY

Module: MFC1C28

Explanation: The CLEAR key was pressed by the terminal operator. No data was transmitted and the screen has been reformatted.

User Response: None.

ADFE237 SCREEN REFORMATTED - PA2 KEY

Module: MFC1C28

Explanation: The PA2 key was pressed by the terminal operator. No data was transmitted and the screen has been reformatted.

User Response: None.

ADFE238 INVALID PAGE REQUEST

Module: MFC1C28

Explanation: The format of the request-for-new-page entry is improper. The page request is ignored.

User Response: Refer to "Operator Logical Paging" on page 1-28 for the format of page request entries.

ADFE239 LAST PAGE CURRENTLY ON DISPLAY

Module: MFC1C28

Explanation: A terminal operator request was made for a logical page greater than the current page which is the last page of the message. The page request is ignored.

User Response: Self explanatory.

ADFE240 FIRST PAGE CURRENTLY ON DISPLAY

Module: MFC1C28

Explanation: A terminal operator request was made for a logical page less than the current page which is the first page of the message. The page request is ignored.

User Response: Self explanatory.

ADFE800 BATCH DRIVER COMPLETION CODE nnnn

Module: MFC1C30

Explanation: An IMSADF II batch driver invoked from the terminal ended with a completion code nnnn. A completion code of 0104 indicates that another batch driver is currently executing. You may only have one batch driver executing at a time. For the meaning of other batch driver completion codes see the IMS Application Development Facility II Version 2 Release 2 Application Development Guide.

User Response: Take action appropriate to the completion code.

ROLL CALL MESSAGES

The following messages will occur if Roll Call is issued due to a situation which cannot be corrected. The conversation will be terminated. The conversation must be restarted.

The messages will appear on a separate screen with the following heading. The following messages will describe the problem situation in more detail. To view the screen press the PA2 key.

----- PROCESSING ERROR DETECTED -----
message text

ABEND CONDITION (xxxx) DETECTED CAUSE x x x x x

Explanation: A critical error occurred forcing termination of the transaction. The ABEND condition xxxx may be one of the following subcodes:

<u>SUBCODE</u>	<u>MODULE</u>	<u>ISSUING REASON</u>
0101	MFC1V12	MOD entry of ITR not followed by a FIELD or SEG entry.
0102	MFC1V12	Field from ITR can't be found in the field rules: Inconsistency between Input Transaction Rule and Segment Layout Rule. Re-generate the Input Transaction Rule, Segment Layout Rule, and Segment Display screen, using the Rules Generator.
0103	MFC1V12	MOD entry is not the first entry in the ITR.
0104	MFC1V12	MOD entry not followed by a 'SEG' entry.
0106	MFC1V12	Can't find Segment Layout Rule in SPAAUDIT table.
0110	MFC1V13	MOD entry is not the first entry in the ITR.
0111	MFC1V13	ITRSEG does not follow ITRPATHs.
0112	MFC1V13	Can't match MOD to segment.
0113	MFC1V13	Can't find Segment Layout Rule specified in ITR. Refer to subcode 0102.
0114	MFC1V13	Can't find field in the Segment Layout Rule specified in the Input Transaction Rule. Refer to subcode 0102.
0115	MFC1V13	Terminal input field offset not found in Input Transaction Rule. Inconsistency between Input Transaction Rule and MID. Re-generate the Input Transaction Rule and Segment Display screen, using the Rules Generator.
0116	MFC1V13	Can't find field in Segment Layout Rule. Refer to subcode 0102.
0780	MFC1V44	No matching field found.
		A special processing or audit exit routine has called the MAPPER, but the mapping segment identified in the call contains an error. The mapping segment is defined by a Rules Generator SEGMENT TYPE=MAP statement followed by FIELD statements, each having an ID and a SEGID operand.

Subcode 0780 indicates that one or more of these field IDs cannot be found in the segment identified by SEGID.

Note: After correcting the mapping segment, relink-edit the program through the Rules Generator if the MAPTABLE operand has been coded on the GENERATE statement (OPT=STLE,NCLE,SPLE,SPEC,TPLE or BDLE) that requests the link-edit.

User Response: Take appropriate action.

BAD STATUS (xx) ON (CHNG) FROM TRX=(trxname1) TO TRX=(trxname2) LTERM=(ltermnam)

Explanation: Error occurred during a transaction switch.

User Response: Verify that the transaction name is defined in the system.

BAD STATUS (xx) ON MSG CALL (xxxx) IN TRX =(trxname)

Explanation: Error occurred during retrieval from the message queue.

User Response: Contact your systems programmer.

CONFLICTING DATA BASE ACTIONS REQUESTED ON A SINGLE DATA BASE RECORD TRX=(trxname)FIRST 5 IDS FUNCTIONS ARE X X X X X

Explanation: Actions requested are not compatible.

User Response: Contact your systems programmer.

DATA BASE ERROR ON SEGMENT (ss) STATUS=(xx) TRX=(trxname)

Explanation: Error occurred accessing a data base.

User Response: Contact your systems programmer.

DATA BASE ERROR ON SEGMENT (ss) DURING (call) STATUS=(xx) TRX=(trxname)

Explanation: Same as above, with the addition of the type of data base call.

User Response: Contact your systems programmer.

DATA COMPARE FAILED - RESTART TRANSACTION

Explanation: Partial update has been completed when update fails for this iteration of the screen. The conversation is terminated.

User Response: Restart the conversation.

ERROR ON SPA (xxxx) STATUS=(xx) TRX=(trxname)

Explanation: Error occurred retrieving or inserting SPA.

User Response: Contact your systems programmer.

FIELD (xxxxxxx) COULD NOT BE LOCATED IN THE WORK AREA DURING TRX(trxname). MAKE SURE THAT SEG(xx) HAS DISPLAYABLE DATA OR IS IN EITHER TSEGS= OR DBPATH=

Explanation: As in message.

User Response: As in message.

INVALID TRANCODE FOR MENU-PROCESSING. (TRX=trxname)

Explanation: The Sign-on and Menu Processor has encountered a transaction code which is not valid.

User Response: Contact your systems programmer.

INVALID RETURN CODE FROM MODULE MFC1_____ (RC=nnnnnnnn)

Explanation: The module listed returned an invalid return code to the calling module.

User Response: Contact your systems programmer.

SEGMENT HANDLER RULE FOR SEGID (ss) NOT FOUND IN BATCH DRIVER RULE TRX=(xxxxxxx)

Explanation: The Segment Handler Rule for the named segment was not found.

User Response: Specify SHTABLE= for segid ss on the GENERATE OPTION=BDLE statement and re-run the Rules Generator to generate the Batch Driver Rule.

WORK DATA BASE ERROR ON (xxxx) STATUS=(xx) KEY=(xxxxxxx) TRX=(trxname)

Explanation: A data base error has occurred while accessing the SPA Work Data Base.

User Response: Contact your systems programmer.

CHAPTER 4. ABEND AND COMPLETION CODES

MODULE ABEND CODES

While executing generated transactions, abnormal termination (ABENDs) may occur with user completion codes.

0778

Module: MFC1V55

Explanation: A ROLL CALL has been issued by an IMSADF II module (possibly at the request of a special processing routine via return code 24).

A message will appear at the terminal which will explain the cause of the error. See "Roll Call Messages" on page 3-45.

If executing an IMSADF II conversational driver, it is necessary to sign on again after a U0778 ABEND.

35XX ABENDS

3501

Module: MFC1V51

Explanation: WRKSEGS is not zero for this IMSADF II system, meaning that the SPA Work Data Base is to be used, but the application PSB does not contain a PCB for the Work Data Base.

3502

Module: MFC1C51

Module: MFC1V51

Explanation: The storage area used to contain SPA data is not large enough. See the DEFADF macro in the IMS Application Development Facility II Version 2 Release 2 Installation Guide.

3503

Module: MFC1V51

Explanation: WRKSEGS for the IMSADF II system is greater than 15, or less than 0. See the DEFADF macro in the IMS Application Development Facility II Version 2 Release 2 Installation Guide.

3504

Module: MFC1V51

Explanation: The application PSB contains a PCB for the Work Data Base, but WRKSEGS for this IMSADF II system is zero, meaning that no SPA Work Data Base is to be used.

3505

Module: MFC1C52

Module: MFC1V52

Explanation: Invalid function requested. This is most likely an IMSADF II internal error.

3510

Module: MFC1UMM

Explanation: Error returned from Data Mapper (MFC1V44) for segment PG, MG, UH, or US.

3525

Module: MFC1V02

Explanation: Empty sequence table in SEQ conflict.

3526

Module: MFC1V02

Explanation: Proper entry not found in SEQ table.

3591

Module: MFC1T9CP

Explanation: A batch Special Processing Routine has issued a checkpoint call, for which the length of the user data area is passed to IMSADF II. The length of this area is zero or negative.

3592

Module: MFC1T9CP

Explanation: A batch Special Processing Routine has issued a checkpoint call, for which the length of the user data area is passed to IMSADF II. The length of this area is greater than the maximum allowed.

3598

Module: MFC1T9RS

Explanation: A batch Special Processing Routine has issued a restart call, for which the length of the user data area is passed to IMSADF II. The length of this area is zero or negative.

3599

Module: MFC1T9RS

Explanation: A batch Special Processing Routine has issued a restart call, for which the length of the user data area is passed to IMSADF II. The length of this area is greater than the maximum allowed.

36XX ABENDS

The following ABEND codes (3600 series) apply to special processing, to audit exit routines that use the special processing calls and facilities, and in some cases to DL/I Auditor calls (operation code 36 leading to an internally performed SEGHNDLR call).

3601

Module: MFC1ESPI

Explanation: Segment not found in SPA when all parms given.

SEGHNDLR call was issued with a segment ID which is not in the generated transaction. To issue SEGHNDLR calls against a segment ID it is necessary to do one of the following things:-

1. Name the segment in the TSEGS operand of the GENERATE TRXID statement.
2. Ensure that the segment is either named in the DBPATH operand of the GENERATE TRXID statement or is implied by having a dependent segment named in DBPATH and by having at least one field displayed (conversational processing) or updatable (nonconversational and batch).
3. If the segment is not named or implied on the GENERATE TRXID statement, supply all six parameters on the SEGHNDLR call.

3603

Module: MFC1ESPI

Explanation: Key for segment not given when required.

When issuing a SEGHNDLR call with all six parameters coded, the third operand must contain the fully concatenated key of the segment, and the fourth operand value must indicate code 'F', for full key, in the first byte. When using a SEGHNDLR call with fewer than six parameters, the fully fully concatenated key must be supplied as the third parameter (with 'F' for full key coded or defaulted in the fourth parameter) if this is the first DL/I operation performed against this segment ID by the program through a SEGHNDLR call or by the Auditor or transaction driver.

3604

Module: MFC1ESPI

Explanation: DL/I function request invalid.

The second parameter in the SEGHNDLR call must be a four-character DL/I function code. The code begins in position one and is followed by spaces if needed to complete the length of four. Similarly, in the DL/I Auditor call (operation code 35), spaces must follow the DL/I function code to pad up to the length of four. The valid codes are documented in Chapter 3, "Error Messages."

3605

Module: MFC1ESPI

Explanation: Invalid PCB#. Key area may be destroyed.

The fifth parameter in the SEGHNDLR call must be either:-

1. A fullword (4 byte) binary number in the range 1 to 120 indicating the relative number of the application data base PCB in the PSB.
2. The data base PCB itself (not a PL/I pointer).

3606

Module: MFC1ESPI

Explanation: End of input parms not found when call requires them.

3607

Module: MFC1ESPI

Explanation: No user PCBs found in parms from transaction driver.

3609

Module: MFC1ESPI

Explanation: Attempted move of negative amount. Rule probably in error.

3610

Module: MFC1ESPI

Explanation: Common module called during final call to batch driver. Not allowed.

In batch processing when EOR = YES is specified on the GENERATE TRXID statement, the special processing program receives control after the last TRANSIN input record has been processed. At this point, the program must not call any IMSADF II subroutines.

The purpose of the call is to enable batch data sets to be closed. The program can recognize the last call by the value of SPAFIRST=-1.

3611

Module: MFC1ESPI

Explanation: Wrong number of parameters passed to MFC1ESPI for this function.

A special processing or audit exit routine has made a functional call passing too few or too many parameters.

3612

Module: MFC1ESPI

Explanation: Key not supplied for a 'KEYONLY' segment. Key is required.

3614

Module: MFC1ESPI

Explanation: Requested function invalid.

3678

Module: MFC1ESPI

Explanation: User I/O area not supplied when needed after 'SETSSA'.

In a SEGHNDR call following a SETSSA call, a fourth parameter supplying an I/O area must be provided unless the segment name quoted in the last segment search argument of the SETSSA call matches the value (or the default) of the NAME operand on the Rules Generator SEGMENT statement that defines this segment ID.

3681

Module: MFC1ESPI

Explanation: 'SETSSA' target segment ID not equal to 'SEGHNDR' ID. Use RSETSEGH to clear flags and reset.

After a SETSSA call, a SEGHNDR call must be issued with the same segment ID without any other intervening SEGHNDR calls.

3682

Module: MFC1ESPI

Explanation: Target segment located for 'SGN' with ID not equal to ' ' is a 'KEYONLY' segment. IMS/VS segment name is not available.

3689

Module: MFC1ESPI

Explanation: For a 'SGN' or GUI' request, either six parameters were specified, or the user I/O area was not supplied. The user I/O area is required since the retrieved segment is not defined in the Input Transaction Transaction Rule (ITR).

3690

Module: MFC1ESPI

Explanation: User I/O area required but not supplied. Previous 'SETCC' or 'SETPATH' may have caused the requirement.

A SEGHNDR call following a SETCC or SETPATH call must have an I/O area (sixth parameter) specified if any path call command codes (D) have been set with SETCC or if SETPATH has been used outside a defined path.

3691

Module: MFC1ESPI

Explanation: Invalid parameter passed to the 'SETPATH' routine.

3692

Module: MFC1ESPI

Explanation: Target segment not in the Input Transaction Rule (ITR), or it's a 'KEYONLY' segment. Segment is required to be in ITR.

Invalid parameter passed in a SETPATH call.

3693

Module: MFC1ESPI

Explanation: ITR error. Path improperly defined for this target segment.

3695

Module: MFC1ESPI

Explanation: An ID specified in 'SETPATH' call was not found in the path.

3696

Module: MFC1ESPI

Explanation: A target segment specified in a 'SETPATH' call was not found in the ITR.

SETPATH call quoting a segment not named or not the parent or higher level of a segment named in the DBPATH operand of the GENERATE TRXID statement.

3698

Module: MFC1ESPI

Explanation: Attempt to set a command code of either 'D' or 'N' after a previous 'SETPATH' call. 'SETPATH' is the only function available to modify the effects of a previous 'SETPATH'.

3699

Module: MFC1ESPI

Explanation: The Rules Generation for this transaction specified that the Special Processing Routine was written in PL/I, but no Non-Main PL/I procedure was included in the linkage editor input.

37XX - 40XX ABENDS

The following ABEND codes are not restricted to Special Processing.

3707

Module: MFC1T07

Explanation: Conversational Special Processing Routine has requested an ABEND.

3727

Module: MFC1T07

Module: MFC1V15

Explanation: Bad return from Message Writer.

3737

Module: MFC1T07

Explanation: Bad return from Message Writer.

3767

Module: MFC1T07

Explanation: Error in Input Transaction Rule.

3777

Module: MFC1T07

Explanation: Segment IDs do not match the Input Transaction Rule (ITR) and the Segment Layout Rule (SLR).

3781

Module: MFC1V44

Explanation: Indeterminate data conversion error has occurred (return code from MFC1V46 greater than or equal to 16).

3782

Module: MFC1V44

Explanation: Option passed to Mapper was not 0 or 1, or Option/field not defined as a fullword.

3787

Module: MFC1T07

Explanation: Bad return from Message Writer.

3790

Module: MFC1T08

Module: MFC1V47

Explanation: Secondary transaction error returned from MFC1V45.

3791

Module: MFC1V47

Explanation: Secondary transaction error returned from MFC1V22. Register 2 at entry to ABEND will indicate what type of failure occurred during the secondary transaction routing.

REG 2	Explanation
2201 (899)X	Non-blank status code on ISRT IOPCB
2202 (89A)X	Non-blank status code on PURG after the ISRT IOPCB
2203 (89B)X	Non-blank status code on CHNG to the alternate IOPCB
2204 (89C)X	Non-blank status code on ISRT to the alternate IOPCB
2205 (89D)X	Non-blank status code on PURG after the ISRT to the alternate IOPCB
2206 (89E)X	SD (Secondary Destination) Segment not found in the Message Data Base. Note that the SD segment key is equal to the Output Format Rule name.

3792

Module: MFC1T08

Explanation: MODNAME not defined in Input Transaction Rule.

3937

Module: MFC1T09P

Explanation: Bad return code from MFC1V37. Probably a bad parm list passed.

3940

Module: MFC1V45

Explanation: Output Format Rule indicates that secondary transaction is of zero length.

3941

Module: MFC1V22

Explanation: Message length less than 5.

3942

Module: MFC1V34

Explanation: Print message length less than 5 (message length passed from Special Processing Routine was 0 or negative).

3990

Module: MFC1V53

Explanation: Conflicting DB processing detected (e.g. REPL or DLET calls are issued and the segment could not be found).

3991

Module: MFC1V53

Explanation: Unknown return code from MFC1V09 detected.

3998

Module: MFC1V53

Explanation: First non-KEYONLY segment not found in path.

3999

Module: MFC1V53

Explanation: Bad function code (8) received from Segment Handler.

4001

Module: MFC1V43

Explanation: Data type cannot be converted.

4002

Module: MFC1V43

Explanation: Unknown return code from MFC1V46.

4004

Module: MFC1V10

Explanation: Return code of 16 or greater from MFC1V09 (Segment Handler). Problem with path call logic.

4006

Module: MFC1V09F

Explanation: More than 1 SSA for an MSDB call or more than 15 SSAs for a DEDB call.

4007

Module: MFC1V09F

Explanation: Command code other than '-' or 'P' in DL/I call.

4008

Module: MFC1V09F

Explanation: Number of CMD codes greater than 16.

4009

Module: MFC1V09S

Explanation: Tried to use DB2 but DB2 not installed (i.e., DFSLI000 does not have entry point DSNALI).

4061

Module: MFC1V50

Explanation: The IMS/VS Feature of IMSADF II has not been link-edited with the ???V50 load module. This is most likely caused by a user error in the installation of the product. For additional information, see the IMS Application Development Facility II Version 2 Release 2 Installation Guide.

4070

Module: MFC1C30

Explanation: The IMSADF II batch driver was executed; the DFHTCT entry for the invoking terminal was defined as an OS sequential data set; and the completion code was non-zero.

IMSADF II's ABENDING the batch job step, allows the user to have conditional execution of subsequent job steps based on successful completion of the batch driver.

User Response: Check the SYSPRINT output of the batch driver to determine the reason for the non-zero completion code.

4072

Module: MFC1V55

Explanation: Invalid error code parameter.

4073

Module: MFC1V55

Explanation: Bad status on 'CHNG' call.

A 'CHNG' call has been issued in order to switch to another IMS/V5 transaction code. An unexpected status code has been returned. One cause is that the transaction code has not been included in the IMS/V5 system definition.

If this ABEND occurs while running IMSADF II under the IMS/V5 Batch Terminal Simulator (BTS), add the following control card to the BTS input:

./T TC=IOPCB PLC=0

This may occur if an application results in a ROLL CALL situation where IMSADF II will attempt to send an error screen using the express PCB, but the IOPCB LTERM name has not been defined to BTS.

4074

Module: MFC1V55

Explanation: The number of variable pieces of data is too large. This is most likely an IMSADF II internal error.

4078

Module: MFC1EPTR

Module: MFC1T09X

Module: MFC1V21

Explanation: This is an IMSADF II internal error. The register save area chain is followed backwards looking for the characters 'ADF ' in the first word of a save area. If none is found, an ABEND is issued.

4079

Explanation: On entry to every online IMSADF II routine, the automatic storage for the routine is allocated from a storage pool acquired at the start of IMSADF II processing. If the available storage is insufficient, this ABEND is issued. This is most likely an IMSADF II internal error.

The amount of storage acquired for the storage pool (push down stack) is defined in the IMSADF II control block MFC1CAS by the CASAM macro.

426X ABENDS

4260

Module: MFC1C26

Explanation: A CHKP call or an XRST call was issued and the number of parameters passed is greater than 18. This is probably an IMSADF II internal error.

4267

Module: MFC1C26

Explanation: A XRST call was issued and the length of an IOAREA was found to be greater than 32,767. This is probably an IMSADF II internal error.

4268

Module: MFC1C26

Explanation: A CHKP call was issued and the length of an IOAREA was found to be greater than 32,767. This is probably an IMSADF II internal error.

4269

Module: MFC1C26

Explanation: A CHKP call was issued. After processing the call, the CICS SCHED PSB call fails when attempting to re-schedule the PSB. This is probably an IMSADF II internal error.

SYSTEM ABEND CODES

Certain system ABEND codes may be encountered while testing IMSADF II transaction. The following list describes the more commonly encountered problems. The explanations do not cover all possible situations.

0C4 Addressing exception.

A common cause of addressing exceptions is an invalid PSB. Check that the PCBNO operands on the Rules Generator SEGMENT statements are consistent with the PSB itself (PCBNO=1 is the default, meaning the first application data base PCB in the PSB). Check the ACBGEN for warnings or error messages.

0C7 Data exception.

The ABEND occurs when fields defined as decimal or packed decimal are retrieved from a data base and are found to contain data of a different format.

806 Module not found in a library.

If conversational processing is in use, begin by referring to the following checklist of rules that are required to be generated for successful execution.

1. The PGROUP operand value on SYSTEM or GENERATE statements must be equal to the key of the PG segment in the Sign-on Profile Data Base. (PGROUP value is part of the Input Transaction Rule name).
2. Every data base segment should have a GENERATE SEGMENT= statement with OPTIONS=(SEGH,SEGL,KEYS).
3. Every other segment should have a GENERATE SEGMENT= statement with OPTIONS=SEGL.
4. A Secondary Option Menu Rule must be created with a GENERATE OPTIONS=SOM statement.
5. A Primary Option Menu Rule must be created (once per application system) via the POMENU operand of the SYSTEM statement or the OPTION=POM operand of the GENERATE statement.

Assuming that the product has been installed correctly, the module name is likely to be a rule or possibly a version of the transaction driver.

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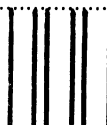
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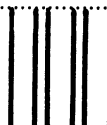
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